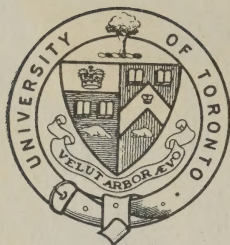


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DESCRIPTIONS

OF THE

TOWNSHIPS OF THE NORTH-WEST TERRITORIES

DOMINION OF CANADA.

v. 2

BETWEEN THE THIRD AND FOURTH INITIAL MERIDIANS.

PUBLISHED UNDER THE AUTHORITY

OF THE

Hon. THOMAS WHITE,
MINISTER OF THE INTERIOR.

COMPILED AND ARRANGED FROM THE FIELD NOTES,
PLANS AND REPORTS OF THE SURVEYORS

OTTAWA:

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1886.

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NOTICE.

The following descriptions of townships have been prepared from the plans, field notes and reports of surveyors.

Each description has been kept separate from the others, the name of the surveyor and the date of the survey being given in each case.

Sometimes surveyors differ in their appreciation of the value of the land : by the system adopted, the reader will be placed in possession of the different opinions expressed as to the character of the soil.

The mode of survey consists in laying out first the exterior boundaries or outlines of the township and then proceeding with the subdivision ; the same order has been followed in the descriptions.

The townships, in this book, are placed in ranges, the number of the range being at the top of the page and the number of the township in heavy figures on the left side.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE. I.

- 9. Outlines.**—Generally rolling prairie. The soil is dry and chiefly a sandy loam on a clay subsoil, with gravel in places, especially on the ridges, where there are also some large stones. The soil will average about class 2. The soil of Section 6 is poor; this section contains two marshes and there is one marsh in Section 18.—*A. O. Wheeler, 1883.*
- 10. Outlines.**—Rolling prairie, the northern part rolling heavily. There are a few stones and gravel on the ridges. The soil is dry and composed of a sandy loam on a clay subsoil, with gravel in some places, and averaging about class 2. The clay subsoil is sometimes brown and sometimes white. Water is scarce, none being found along the west tier of sections.—*A. O. Wheeler, 1883.*
- 11. Outlines.**—Rolling in the north and south, with a few stones and gravel on the ridges. Hilly in the centre with stones and gravel on all the hills. A few fresh water sloughs may be found. The trail from Wood Mountain to Qu'Appelle passes through the north-west corner of the township. The soil is a sandy loam, with a dark clay subsoil and class 3. Big Grass Marsh is in Section 6.—*A. O. Wheeler, 1883.*
- 12. Outlines.**—Rolling prairie; soil sandy loam, from 4 to 6 inches deep, on a clay subsoil; class 3, except Section 31, which is class 2. Along the west are several ridges, averaging about 20 feet in height. A large alkaline slough is situated on portions of Sections 8 and 18. The Qu'Appelle and Fort Walsh cart trail passes through this township.—*A. O. Wheeler, 1883.*
- Along the northern boundary, the surface is undulating with an eastward slope to Old Wives Lake, and the soil is very sandy.—*W. T. Thompson, 1882.*
- Sub-division.*—The general surface of this township is broken and rolling prairie having an eastward slope towards Old Wives Lake, and without any wood whatever. The soil is very sandy and little adapted for agricultural purposes; the water throughout is alkaline, and the north-easterly corner of the township is cut off by Old Wives Lake. A deep water marsh of about 600 acres occupies large portions of Sections 8, 17 and 18. The path of the Fort Walsh and Qu'Appelle trail lies east and west across the township immediately north of this marsh.—*Chas. Leclerc, 1883.*
- 13. Sub-division.**—The greater portion of this township is covered by Old Wives Lake; the remaining portion consists of Sections 4, 5, 6, 7, 8, 9, 17 and 18, with the adjoining sections more or less broken by the lake. The surface is undulating prairie, with a sandy loam soil, no wood of any kind, and an eastward slope to Old Wives Lake.—*Chas. Leclerc, 1883.*

- 14. Outlines.**—The country being a portion of the Coteau du Missouri, is exceedingly hilly, with ponds of both fresh and alkali water intervening, and can only be classed as third class agricultural land. Old Wives Lake occupies the southern portion of this township.—*J. K. Maclean*, 1882.

Sections 36, 25 and 24.—Rolling prairie, gravelly soil, class 2. The Cypress Hills trail to qu'Appelle and the south end of the Coteau du Missouri cross Section 24. Section 13 is sandy and light.—*Thomas Drummond*, 1881.

Sub-division.—Very undulating and broken by swamps, which are to a large extent alkaline, but some are fresh, and there is plenty of fresh water throughout the township. There is no growth of wood, and the land is fit for pasture only. The southern portion, or about one-third of the township, is broken by Old Wives Lake, the water of which is somewhat alkaline and the shores rocky.—*C. F. Caddy*, 1883.

- 15. Outlines.**—The country being a portion of the Coteau du Missouri, is exceedingly hilly, with ponds of both fresh and alkali water intervening, and can only be classed as third class agricultural land.—*J. K. Maclean*, 1882.

The easterly sections are rolling prairie, with a gravelly soil and class 2. There are quite a number of alkaline ponds and some marshes.—*Thos. Drummond*, 1881.

Sub-division.—Very undulating, broken and rocky, with intervening marshes; the soil generally is sandy, but gravelly in many places and without any growth of wood. There is a fair supply of good water throughout the township, and it is more suitable for pasturage than agriculture, as it can only be termed third class land with some portions of second class adjacent to the third meridian.—*Chas. F. Leclerc*, 1883.

- 16. Outlines.**—The northern part is generally level prairie, watered by several small creeks, which rise in the Coteau. Some ravines in the foot hills are timbered with small poplar and ash. Among the hills the grass is good and water plentiful. The soil varies between a reddish brown clay and clay loam, the sub-soil generally clay. Stones and gravel are frequently met on tops and sides of hills. On tops of hills numerous fresh water marshes exist, while the water in the valleys is generally brackish.—*Thomas Fawcett*, 1882.

The south being a portion of the Coteau du Missouri, is exceedingly hilly, with ponds of both fresh and alkali water intervening.—*J. K. Maclean*, 1882.

Sub-division.—The northerly portion is rolling prairie, gravelly and stony in places, but good farming land. The southerly portion is good for grazing only, and is much broken by ravines with bare rock on the tops of the hills; water is abundant throughout the township, and there is no wood with the exception of some small brush in the ravines.—*Chas. F. Leclerc*, 1883.

- 17. Outlines.**—The north part is an open, gently rolling prairie. Soil, generally a loamy sand of great depth, class 3.—*F. W. Wilkins*, 1882.

The southern part of this township is similar to the northern part of Township 16, and is there described.—*Thomas Fawcett*, 1882.

The easterly sections are rolling prairie; soil, pure sand, in the northeast, class 4, and graduating to a light soil in the southeast, class 2. Thunder creek crosses Section 25, has a swift current, is about 6 links wide and 2 links deep.—*T. Drummond*, 1881.

Sub-division.—There is a large proportion of fine land in Sections 6, 7, 8 and 18, with a great depth of rich clay loam on a clay subsoil. This soil extends in considerable areas over the southern sections, but towards the north it becomes a sandy loam, in which wheat grows readily as seen along the C. P. R. track, which crosses the northern portion of the township. There is no timber or wood, except some small poplar in a few of the ravines of the southern sections. Along the northern boundary the soil becomes more sandy and may be classed 3. There is a good, but not plentiful supply of water; Sandy Creek has plenty in Section 24 all the season, but dries up in Section 23.—*C. F. Caddy*, 1883.

18. *Outlines.*—The northern part is an open rolling prairie. Pelican Lake occupies the northeasterly sections. Section 36 is hilly with creeks. The soil west of this is a very loamy sand, class 3; and east of it, a hard sandy clay of great depth, classes 1 and 2. The western part is open rolling prairie. The soil from Sections 6 to 30, is a loamy sand of great depth. Section 30 is a sandy clay with many alkaline ponds, and Section 31 is pure sand.—*F. W. Wilkins*, 1882.

The eastern Sections, 1, 12, and 13, are rolling prairie with a sandy and gravelly soil, class 4. Pelican Lake is on sections 24 and 25, north of which the soil is a rich clay and class 1.—*T. Drummond*, 1881.

Sub-division.—The eastern portion is broken by Pelican Lake, which covers Sections 35, 24, 26, and parts of 23, 34 and 36. The soil is mainly a light sandy loam and clay subsoil. There are no ponds in the township containing good water; but good water is obtained by digging between the sand ridges to a depth of 6 or 7 feet. The township is generally level, except the sand ridges. The water in Pelican Lake is brackish, but may be used. There is no wood in the township. There is fair building stone to be obtained along the lake shore.—*C. F. Caddy*, 1883.

19. *Outlines.*—The northern part of this township is open rolling prairie, with a few scattered ponds. Soil, a hard, dry, sandy clay and class 2.—*F. W. Wilkins*, 1882.

The southern portion is open and gently rolling prairie, with a sandy soil and class 4. Pelican Lake is in Sections 4, 9, 10, 2 and 3. Soil, immediately east of the lake is pure sand, after this the land rises to the northeast when the soil becomes a clay loam. A few small marshes occur in Section 31. Section 30 and half of 19 are very stony. In 19 is Wigmore Creek, running through a clay flat, with a one mile current, two feet depth of water and a stony bottom. This creek joins Pelican Lake across section

17. The south of Section 6 has a few small sand hills. Sections 6 and 7 are very sandy, 18 and 19 stony clay loam, 30 a bed of stones and 31 a deep sandy clay, class 2.—*F. Wilkins*, 1882.

Sub-division.—Land excellent for grain, with a soil of a deep clay loam on a clay subsoil—most of it class 1, especially the eastern sections. Sections 2, 3, 4, 8, 9 and 10 are broken by Pelican Lake, the water of which, although not the best, is yet fit for use. The shores of the lake are of a sand and gravel formation, and covered with a fair building stone; there is no wood in the township. In the extreme north and north-east and in the extreme south-west the soil is generally class 2.—*C. F. Caddy*, 1883.

20. *Outlines*.—The northern sections are generally fine rolling prairie, with an excellent soil and a good supply of fresh water in quite a number of ponds and marshes. In Section 32, the country is hilly and the land good, but stony in places, and class 2; other sections are class 1.—*E. Bray*, 1882.

The southern and western portions have a few scattered ponds and marshes, and the soil southwards is a dry clay soil and class 2.—*F. W. Wilkins*, 1882.

Eastwards, there is a rich clay soil, class 1. Marshes occur in Sections 13, 24 and 25.—*T. Drummond*, 1881.

Sub-division.—A rolling prairie; excellent for grain, with general surface features similar to No. 19, except that the soil has a greater admixture of sand and may be placed as class 2. There are a few marshes and ponds which are of a small size and water is not plentiful.—*C. F. Caddy*, 1883.

21. *Outlines*.—The western sections appear to be rather dry, as only one marsh was crossed in Section 18. The northern Sections 31 to 36 are rolling and undulating. Soil, 3 to 5 inches deep on a sandy subsoil and mixed with gravel on the ridges. The north-eastern summit of the Eyebrow Hills is in Section 31. Sections 32 and 33 are broken by coulees and some ridges. Water scarce; 1st and 2nd class.—*G. C. Rainboth*, 1882.

The south is fine rolling prairie, with excellent clay or sandy loam soil; good water in fair supply.—*E. Bray*, 1882.

The eastern sections are rolling prairie with a rich clay soil and class 1.—*T. Drummond*, 1881.

Sub-division.—Open rolling prairie, except in Sections 31, 32, 33 and 34, where the prairie is broken by some deep coulees or ravines. Soil, a clay loam, good for grain of any kind; there are a few small marshes and ponds, and no trees. The Temperance Colony trail passes across the township.—*C. F. Caddy*, 1883.

22. *Outlines*.—Sections 31 to 34 are undulating prairie, sections 35 and 36 are rolling. The soil is about 3 inches deep on sandy subsoil and class 2; water is scarce, only one marsh being found in section 31. Along the western boundary the surface is rolling and undulating, soil sandy loam and class 2. At the section corner between 30 and 31 the surface slopes from 125 feet to the Qu'Appelle Valley. There is a large marsh in Section 31. Southwards, the lower tier of sections is undulating and rolling. The Eyebrow Hills are in Section 6, water is scarce, land is second class.—*G. C. Rainboth*, 1882.

The eastern sections are prairie with a rich clay soil and class

1. Section 24 is traversed by the Qu'Appelle River and its valley, and is somewhat alkaline.—*T. Drummond*, 1881.

Sub-division.—There is a large quantity of broken land, consisting of deep ravines and the banks of the Qu'Appelle River valley, which are steep, rough and stony. Generally, there is an excellent clay loam soil, good for farming and growing grain. In the valley, which is about one mile wide, the soil is deep and rich, producing good hay. The river is almost dry in the autumn. There is some small poplar and birch on Sections 4 and 5. Section 31 has a large marsh produced from Sandy Lake, in Township 23, Range 2. Three large coulees branch from the river valley, one westward, one northward, and the third southward.—*C. F. Caddy*, 1883.

23. *Outlines.*—The northern part is undulating and rolling; soil averages 3 inches deep (sometimes it is 7) on a subsoil of sand and sometimes gravel, class 2. Two small sloughs on section 32. The southern Sections, 1 and 2 are rolling, and 3, 4, 5 and 6 are undulating with a 3-inch soil on a sandy subsoil, class 2; water scarce. One marsh on Section 6; here the land slopes to the Qu'Appelle valley.—*G. C. Rainboth*, 1882.

Eastern sections possess a rich clay soil, class 1. A deep ravine running to the Qu'Appelle River crosses Section 13 and contains running water in the early summer. Two or three marshes on Section 25.—*T. Drummond*, 1881.

Sub-division.—Is a rolling and undulating prairie, good farming land, good hay in the swamps and no wood. Soil is class 2, being composed of a sandy loam, with a sand and clay subsoil; the marshes are small and well distributed. Sandy Lake Marsh encroaches on Section 6—south-west corner.—*J. Bourgeois*, 1883.

24. *Outlines.*—The northern part is rolling prairie, with a good clay loam soil, class 2, and dotted here and there with small marshes.—*E. Bray*, 1881.

Along the west line it is rolling prairie with a sandy loam soil 3 to 5 inches deep, on a sandy subsoil sometimes mixed with clay, class 2. There is very little water on the line, except two marshes on Section 18 and 19. Southwards, rolling and undulating; the soil averages three inches in depth, although in some places it is 7 inches; the subsoil is sand and in some places gravel, class 2. Two small sloughs were crossed on section 5.—*G. C. Rainboth*, 1882.

Easterly sections have a rich clay soil and class 1, with level prairie northwards and rolling prairie southwards.—*T. Drummond*, 1881.

Sub-division.—Has a rolling and undulating surface of a sandy loam soil on a sandy subsoil, and may be rated generally as class 2; is good for farming and grazing; but is without wood; has some good hay on the marshes, which are well scattered throughout and are of small size.—*J. Bourgeois*, 1883.

25. *Outlines.*—Rolling prairie with good clay loam soil, ranks class 2. A few marshes are to be found along the south, and water generally appears to be plentiful.—*E. Bray*, 1881.

The surface along the east boundary is prairie, with a rich clay soil and class 1. There are occasional marshes to be found. *T. Drummond*, 1881.

- 26. Outlines.**—Prairie with rich soil, class 1. Water rather scarce along the eastern boundary.—*T. Drummond*, 1881.

- 27. Outlines.**—The eastern portion is all prairie land. The soil is somewhat gravelly, but has a good clay subsoil and ranks class 2.—*T. Drummond*, 1881.

- 28. Outlines.**—Northwards: Rolling prairie, with numerous grass swamps. The soil is a clay loam 6 inches deep on a clay sub-soil, class 2. Section 31 is hilly. Surface water is generally found to be pure and fresh. Sections 36, 25, 24 and 18 are rolling prairie, with a rich loam soil and a few swamps, classes 1 and 2. Sections 12 and 1 are gravelly, but with a good clay sub-soil, class 2.—*T. Kains*, 1882.

- 29. Outlines.**—Rolling open prairie of a light sandy loam soil. Numerous spring marshes are scattered over the surface. In the north there is a ridge of hills 40 to 70 feet high, running in a southeasterly direction. The soil is poor and not advantageous for agricultural purposes. *J. J. Dufresne*, 1884.

The country southwards is high rolling prairie, inclined in places to be hilly, and interspersed with a few grass swamps, the waters of which were generally found to be pure and free from alkaline matter.—*T. Kains*, 1882.

Along the east the surface is rolling prairie and the soil is second and third class; in several places being very stony. The soil of Section 1 is a first class rich loam.—*T. Drummond*, 1881.

- 30. Outline.**—Open hilly prairie with marshes and ponds in nearly every hollow. The hills are small and very numerous. The soil consists of a light sandy loam, good generally.—*J. J. Dufresne*, 1884.

Along the east boundary; soil, second and third class; in several places very stony and with a heavy rolling surface.—*T. Drummond*, 1881.

- 31. Outlines.**—Open, hilly and rolling prairie of a light sand loam soil. Numerous lakes—some of which are not less than one-half mile square—are met with. The soil is sandy loam, and varies from 2nd to 3rd rate.—*J. J. Dufresne*, 1884.

Along the east boundary the soil is third class; in several places being very stony and hilly.—*T. Drummond*, 1881.

- 32. Outlines.**—Open rolling prairie, with a light sandy loam soil, ranking from second to third class land. Water is scarce.—*J. J. Dufresne*, 1884.

Along the eastern sections the surface is rolling, with a rich loam soil and class 1; except Section 1, which is classes 2 and 3, and in places very stony.—*T. Drummond*, 1881.

Along the north boundary the surface is open and undulating, with a dry sandy loam soil, and second class.—*C. A. Bigger*, 1882.

- 33. Outlines.**—Along the eastern tier of sections, from 36 to 12, the soil is somewhat gravelly, but has a good clay bottom and ranks second class.—*T. Drummond*, 1881.

Along the south it is undulating prairie; soil dry sandy loam, second class; cart trail in Sections 5 and 6.—*C. A. Bigger*, 1882.

Westwards, Sections 6 and 7, heavy rolling, with several ponds; small marshes in 18, 19 and 30, 31 rather dry.—*Sub-division plan*.

Sub-division.—Is a prairie township and without wood of any kind. The soil is a sandy loam, of from eight to twenty inches in depth. The southern part is traversed by a range of sandy hills, running east and west. There are also a number of lakes and hay marshes in the southern half of the township. One lake in the south-east corner is about 300 acres in area, and there are at least two marshes about double that area. The north half of the township is very much dryer.—*Thos. Byrne*, 1882.

- 34. Outlines.**—Along the eastern tier of sections it is a level plain with a rich soil—first-class—as far south as Section 24. From Section 24 to Section 1, the soil is second class, somewhat gravelly, but has a good clay bottom.—*T. Drummond*, 1881.

Sub-division.—Is rolling prairie with loam from four to twenty inches deep, on a clay subsoil. It is slightly stony on the east side, but is well suited for agricultural purposes. There are a few hay meadows, but no timber of any kind. The northern, eastern and southern sections are good level prairie, with a first class soil on a clay subsoil, and a few marshes.—*Thos. Byrne*, 1882.

- 35. Outlines.**—The northern is rolling prairie and good land. The alluvial soil is 20 inches deep on a clay subsoil, class 1. Sections 31, 32 and 33 are rather level. A few marshes occur. In the south several marshes were found, and in section 7 there is a large alkaline swamp. In Section 12 a portion of a lake was crossed, but water is generally scarce.—*Thos. Byrne*, 1882, and *T. Drummond*, 1881.

Sub-division.—Is undulating prairie, with a soil of deep clay loam, and nearly all first class. The water in the ponds and sloughs is impregnated with alkali. There is no wood of any kind.—*T. Byrne*, 1882.

- 36. Outlines.**—In the northeast there is a range of high hills, running east and west, and extending southwards about 4 miles. Through these hills the soil is somewhat gravelly, but has a good clay bottom and ranks second class. After leaving the hills in section 12 there is a level plain with a rich soil and first class.—*T. Drummond*, 1881.

In the northern part the soil is light and grows short grass. Water is good and fresh.—*W. A. Ashe*, 1882.

Sub-division.—Is rolling prairie; the southern two-thirds is a dark clay loam, and well suited for agricultural purposes. The northern one-third is lighter soil and stony in places. There are numerous ponds and marshes throughout the township, the water of which is all clear and fresh. There is no wood of any kind.—*T. Byrne*, 1882.

- 37. Outlines.**—The central portion of this township, from east to west, is open rolling prairie, classes 1 and 2. There are several ponds and swamps, and in the centre a medium sized lake.—*J. S. Dennis, jr., 1878.*

Along the eastern boundary, it is rolling sandy prairie full of high knolls and small ponds, class 2.—*T. Drummond, 1881.*

Outlines and Sub-division.—Gently undulating prairie. Alluvial soil, from 2 to 8 inches deep, on a clay loam subsoil. Section 31 is class 3, and in the eastern part lies a lake of good water. Section 32 is also class 3; the other north sections are class 1. Some thick willow occurs in Section 35. The southern boundary is open rolling prairie, class 2 in section 1, and class 1 in the remaining sections. Several marshes and ponds and three lakes in Sections 4, 5 and 6. In the west, it is undulating prairie, dotted with lakes of good water and marshes interspersed with willow. The soil is from 8 to 14 inches deep on a sandy loam subsoil. Sections 6, 7 and 31 are class 3; 18 and 19 are class 1, while Section 30 is class 2. Large sized lakes containing good water are quite numerous. The general features of this township are undulating prairie, with a soil of good quality and well adapted for agriculture. It contains a large number of lakes and a few hills, with occasional clumps of willows, but no timber. The lakes are mostly fresh and occupy mostly the northern portion of the township. Some of these lakes are hundreds of acres in extent.—*S. M. Starkey, 1882.*

- 38. Outlines and Sub-division.**—Sections 6, 7 and 18 are much broken by large lakes. The alluvial soil is from 3 to 5 inches deep, on a stony subsoil, class 3. Section 19 is level and 4th class. Sections 30 and 31, are 3rd and 4th class, and contain willow brush. Sections 1, 12 and 13 are rolling, sandy and full of high knolls and small ponds, class 2. Section 24 is sandy, class 2. Nos. 25 and 36 are flat, gravelly and sandy, class 2. Telegraph line crosses the line in Section 24. The north is level prairie, with swamps, soil from 2 to 4 inches with subsoil of stones, classes 1 and 2. The south is gently undulating, soil from 2 to 8 inches deep, with sand loam subsoil. Section 6 is class 3, and in the north-western part is a large lake of good water. Section 2 is also 3rd class. Sections 1, 3, 4 and 5 are 1st class. Some thick willows in Section 2. Generally this township is undulating prairie, with some hills and numerous small lakes. The soil is not so good as the preceding townships, being more rocky and stony. There are a few bluffs of poplar and willow fit for fencing and fuel. A trail to Edmonton crosses the township bearing east and west.—*S. M. Starkey, 1882.*

- 39. Outlines and Sub-division.**—The general surface of the township is flat and level with some undulating portions. A great part of the country has a first class soil, but portions exist all about which have all grades down to class 4. In the south the alluvial soil has an average depth of 4 inches, in places overlying rocks, classes 1 to 4. Thick willow and poplar brush are here scattered over the prairie, with some marshes. The west is open and level interspersed with some marshes; the soil is a sandy loam, about 8 inches deep and classes 1 and 2. The trail to Edmonton and the telegraph line cross in Section 6; the soil of this section is very

poor. The north has a first rate sandy loam soil, with some poplar and willow; a few marshes along the line and a stream in Section 32. The west end portion of a lake of brackish water, called Buffers' Lake, extends three miles into the east side of the township. This lake covers half of Sections 26 and 36, all of 25, 23 and 24, and portions of 22, 14, 15 and 13. Sections 12 and 13 are level and class 1. Section 1 is rather stony in places and is class 2. There is very little wood in the township, excepting a few small bluffs of poplar and willow.—*S. M. Starkey*, 1882.

- 40** *Outlines*—In the northern part the country is rough and broken with many small bluffs of poplar and brush, which continue over the first five miles, while the sixth mile is mostly prairie. The soil is generally a sandy loam, and some ponds and marshes were met with.—*G. B. Abrey*, 1882.

Sub-division.—Is divided between wood and prairie, the northern portion being thickly covered with poplar and willow, fit for fuel and fencing; the southern portion being principally prairie, sloping gently to the southward, with soil of fairly good quality. The soil in the northern part is not so good, being rough and somewhat rocky. The water in the lakes in this township is fresh and good.—*S. M. Starkey*, 1882.

- 41** *Outlines*.—Southwards, the country is gently rolling, with many small bluffs of poplar and brush, and a sandy loam soil of from 3 to 6 inches deep on a sandy subsoil. In Section 4 a small lake occurs and water is obtainable along the line.—*G. B. Abrey*, 1882.

Along the north there is an alluvial soil of from 6 to 8 inches deep on a clay subsoil, classes 1 and 2. The trail to Prince Albert crosses from Section 36 to Section 19. A small lake lies between sections 35 and 36. Poplar and willow bluffs are scattered over the country. The west line in Section 6 is crossed by a stream 10 feet wide and about 4 inches deep, flowing easterly. This stream, 60 links wide and 1 foot deep—flowing northwest—again crosses the line in Section 18; some heavy wood grows on its banks. In section 31 the Saskatchewan River turns northwards; its banks are heavily wooded. In the eastern part the soil is class 1, and poplar and willow occur in patches.—*C. Carrol*, 1882.

Rolling sandy prairie, class 2. In Section 13 the Carlton trail crosses the line, it is well beaten. In Section 36 there are a few scattered bluffs of poplar. Water is plentiful, several ponds and marshes being seen.—*A. L. Russell*, 1877.

Sub-division.—The easterly portion of this township is chiefly open prairie, of good quality, and contains six lakes, some of considerable size, and all supplied by surface water, and highly alkaline. In the western part the land is also very good, with small islands of poplar, not large enough for building purposes, and barely sufficient in quantity for firewood. Along the banks of the Saskatchewan River, which touches the north-west corner of the township, there is a belt of timber of large size, chiefly poplar and birch, but the quantity is not great. The old trail to Prince Albert crosses the north-east corner of the township. On the whole, the township is well adapted to settlement.—*C. Carroll*, 1882.

42A. Outlines.—The northern portion possesses an alluvial soil from 4 to 10 inches deep, on a sand and sandy loam sub-soil, class 2. In Section 18 the line crosses the River Saskatchewan, here about 11 chains wide. In 17 the Prince Albert trail is crossed. Poplar on both banks of the river. In section 6 the Saskatchewan River strikes the west line twice, in 7 twice and in 18 once. Poplar and willow scattered over the country. In the south and east the alluvial soil is from 6 to 8 inches deep, with a clay sub-soil, classes 1st and 2nd. Trail to Prince Albert crosses from Section 1 to Section 17; a small lake occurs between Sections 2 and 1; the east portion is generally all class 1.—*C. Carroll*, 1882.

The eastern boundary is rolling sandy prairie, with scattered bluffs of poplar, class 2. Water is plentiful in the ponds and marshes.—*A. L. Russell*, 1877.

Sub-division.—The river Saskatchewan cuts off the north-west corner of the township, it also touches the south-west corner and at two intermediate points. The soil in Section 15, and the greater part of Sections 10, 11, 14 and 16, is light and sandy, but the remainder of the township is composed of most excellent land, especially the six westerly sections. In the east it is all open prairie, but in the west there are isolated clumps of timber, barely sufficient for firewood, and none large enough for building purposes. The township is well adapted for settlement, as it is on the trail to Prince Albert, and the land is generally of excellent quality. Is a fractional township.—*C. Carroll*, 1882.

42. Sub-division.—Is on the south branch of the Saskatchewan River, which traverses the full length of the township from south to north, on the west side. West of the river is principally prairie, while the east is well supplied with wood for fuel and fencing, &c. The soil is a very light sandy loam. There were a few settlers already in this township when the survey was made. Lakelets are fairly scattered about in the north-east.—*J. L. Reid*, 1879.

43. Outlines.—A special survey of the east boundary shews it to consist of high rolling and sandy prairie, well watered by ponds and marshes, and classes 1 and 2. Small poplar and willow brush are scattered over the line. Half of Section 24 is pretty well timbered, and a well beaten trail also crosses this section.—*A. L. Russell*, 1877.

Sub-division—The soil of this township generally consists of a very light sandy loam with plenty of wood for fuel. The south branch of the Saskatchewan River runs through the two westerly tiers of sections. Along the east side of the river, and extending from the southern boundary of the township northwards, there is situate the St. Laurent Settlement Reserve. The river is settled on both sides by French Half-breeds. The eastern portion of the township is well covered with poplar and willow scrub and consists of prairie. To the east there are also a number of lakelets. To the west of the river, the surface is rolling and covered with poplar and willow and generally class 1, except Section 2, which is second class. Water is scarce except in the river. Trails cross the line in Sections 31, 30, 19 and 18, and that to Batoche's Ferry, the south of Section 19.—*J. L. Reid*, 1879.

- 44. Outlines.**—A special survey of the east boundary shews it to be high rolling and sandy land, classes 1 and 2, and well watered by ponds and marshes with much poplar and willow brush over the surface.—*A. L. Russell, 1879.*

Along the north line, the country is rolling and the soil is good. Poplar, spruce and tamarac are met with. In Section 36 is the trail to Winnipeg, and in Section 35 the South Saskatchewan River, which is here about 18 chains wide. There is a trail crossing the line in Section 34 and another in Section 31. Second growth poplar, with hazel and willow underbrush, was plentiful. A large marshy lake occurs in Section 33, and several ponds and muskegs along the line.—*W. F. King, 1878.*

The South Saskatchewan River traverses this township, from the southeast to the northwest, dividing it into about equal parts. Both sides of the river are settled by French Half-breeds, some of whom are farming. The soil is a light sandy loam, and is very much cut up by small lakes. The Roman Catholics have a large church and improvements about their reserve. The St. Laurent Settlement Reserve occupies 6 or 7 sections of the south centre of the township. The surface has considerable poplar and willow, but this is fast being cut off. From the settlement the Prince Albert trail goes north along the river, and the Duck Lake trail westwards through section 19.—*J. L. Reid, 1879.*

- 45. Outlines.**—Section 1 is mostly low, wet land, with scattering poplar and willow brush. Two cart trails in this section. The south half of 12 is dry, flat and sandy, with scattering poplar and willows, as far as the Saskatchewan River. North of the river the land rises rapidly and is wooded with poplar. The river, here, is about 14 chains wide, current $2\frac{1}{2}$ miles per hour, banks from 20 to 50 feet high. The remaining four sections are 2nd class and covered with dense poplar and willow. The township is well watered by ponds and marshes.—*A. L. Russell, 1879.*

Sub-division.—The soil is generally yellow sand, covered with a thin layer of vegetable mould, but it is clay, covered with fifteen inches of mould, east of the Saskatchewan River, which runs through the south-easterly sections. The township is well watered with sweet water lakes and creeks, of which the largest are on Section 31, Sections 7 and 8, 21 and 22, and 24 and 25. The largest creek crosses in a diagonal course from Section 19 to Section 34, and the Carlton trail runs parallel to it from Section 30 to 33. The Prince Albert trail runs north through the second easterly tier of sections. The timber is principally in the easterly sections—poplar from five to fifteen inches in diameter, and willow brush; but in the westerly sections, spruce, tamarac and pitch pine, with some poplar and willow brush. Boulders of granite are piled up on both banks of the river.—*R. Rauscher, 1879.*

- 46 Outlines.**—Along the north it is a rolling country and has a sandy soil covered with jack pines. A few ponds occur.—*W. F. King, 1878.*

The eastern boundary lies over mostly high, rolling land, covered with small poplar and willows—class 1. In section 13 a creek of good water, 3 feet deep, crosses the line, flowing east.

The trail to Prince Albert crosses in Section 36, so does a creek 10 links wide and 2 feet deep flowing east. Quite a number of settlers had in this year (1877) located in this vicinity, built houses and had large areas under cultivation, especially of wheat.—*A. L. Russell, 1877.*

Sub-division.—The soil is sandy, but in the two easterly tiers loam, covered with four or five inches of mould, produces good crops of cereals and hay. The timber is poplar, pitch pine, spruce and tamarac, suitable for building and fencing. Two streams in the north-easterly and south-easterly sections flow into the South Saskatchewan. The northerly tier of sections are undulating and rolling, and the soil is class 3. Water is not so plentiful as farther south. The wet area appears to run diagonally from south-west to north-east across the township, and this area embraces several lakes, the largest of which lies in the south-west corner, and the next in size on Section 22. The settlers who have already located are in the south-east quarter.—*R. Rauscher, 1878-9.*

47. *Outlines.*—Along the eastern boundary the surface is rolling, with poplar and willows—class 1. It is well watered by ponds and marshes and the North Saskatchewan, which in Section 36 is about 35 chains wide with a two mile current. There is a cart trail in Section 13. A number of settlers have located here and have considerable areas of land under cultivation.—*A. L. Russell, 1877.*

Sub-division.—The soil is loam, with a good covering of mould in the two easterly tiers; but the south-westerly part is dotted with pine-clad small hills, from thirty to sixty feet high. The timber is small willow and spruce, pitch pine, tamarac and poplar (from four to sixteen inches diameter). The settlers for many miles derive from this township their supplies of material for building, fencing and fuel. The water course running through the township forms itself in places into extensive swamps, but is a streamlet in Sections 27 and 35. Northwards and westwards, the surface is rolling and undulating, with a sandy loam soil, and class 3. A large muskeg extends over sections 31, 30, 16, 17, 18, 19, 20 and 21, with tamarac 4 to 9 and spruce 6 to 12 inches; there is also pitch pine and poplar 2 to 12 inches. Settlers have located in the north-east, near the Saskatchewan River.—*R. Rauscher, 1878-9.*

48. *Outlines.*—The eastern boundary of this township follows the eastern bank of the North Saskatchewan River. Proceeding northwards on this boundary, from Section 24, the surface of the land gradually rises to the centre of Section 36, to which point it is a good clay loam. A belt of poplar, whitewood and spruce extends along the bank of the river. Contiguous to the river this timber is of fair dimensions, but further back it becomes much smaller. Section 36 is rolling and the soil is a red sand, timbered with pine and poplar, the greater part of which has been killed with fire. Crossing the river on the north line, there are steep banks about 40 feet high, an unusually narrow channel of 16 chains, and a five mile current. Going along the north boundary westwards, the soil is sandy. Sections 33 and 34 are covered

with clumps of cherry, poplar and willow scrub. The country is more open to the south. Sections 31 and 32 are heavily timbered. The Saskatchewan again crosses in section 31 with an ascent from the river of 200 feet.—*A. G. Cavana*, 1882.

Sub-division.—The southern portion of the township is nearly all unfit for agricultural purposes; the soil is sandy and covered with small jack pine. The land of this portion is level with steep banks of 150 feet high approaching the Saskatchewan. The northern portion of the township is better suited for agricultural purposes as the soil is a sandy loam. Some spruce timber on the northwest corner is suitable for lumbering purposes; there is a large tamarac swamp on Sections 23 and 26. The township is a fractional one.—*L. Patrick*, 1882.

49. Outlines.—Along the south boundary it is high, dry and rolling prairie, well timbered with small poplar and willow scrub. Alluvial soil is from 3 to 8 inches in depth, resting on a sandy loam and clay sub-soil, classes 2 and 3 generally, but in some places it is class 4. The North Saskatchewan River crosses the southern tier of sections, entering the township at the south-west corner and leaving at the south-east. Spruce and tamarac plentiful.—*A. G. Cavana*, 1882.

50. Outline.—The eastern boundary runs through a tolerably smooth country, but all solid timber. There is a large lake in Section 24, and Shell River crosses the line at the corner between Sections 25 and 36. This stream is of considerable size, being about one chain in width, and 3 or 4 feet in depth, late in the fall, (in the spring it must be much larger.) Along the north side of the river are some patches of clean prairie, the soil of which is very fine. The whole country seems to be heavily timbered, among which poplar, spruce, pitch-pine and tamarac are to be found.—*T. Drummond*, 1883.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE II.

9. *Outlines.*—Rolling prairie, with a few stones and fine surface gravel on some of the ridges. The trail from Qu'Appelle to Wood Mountain passes through this township. Part of a large grass marsh is situated on parts of Sections 34, 35 and 36. Soil, sandy loam with a clay subsoil, class 2. Though generally dry, this township is suitable for agricultural purposes. Two marshes occur—one on Section 1 and one on Section 13. The south throughout is mostly flat, with a very rich soil, shewing in places signs of extensive spring flooding. Water is rather scarce along the western boundary during the summer.—*A. O. Wheeler, 1883.*
10. *Outlines.*—Rolling prairie, with a few stones and gravelly on some of the ridges. A large grass marsh lies on parts of Sections 3, 2 and 1. Soil a sandy loam with a clay subsoil, class 2. Though generally dry, it is suitable for agricultural purposes. The cart trail from Wood Mountain to Qu'Appelle crosses the west line in Section 19. Water is scarce along here, only one slough on Section 6. Along the east boundary it is rolling prairie, with a sandy loam soil, class 2. There is no water on this line with the exception of Big Grass Marsh.—*A. O. Wheeler, 1883.*
11. *Outlines*—Heavily rolling prairie, very hilly in the centre, with gravel stones and boulders on the hills and often in the hollows. Sloughs are numerous in the spring, but dry up in the summer. There is a large grass marsh in the south east. The soil is a sandy loam on a clay subsoil and in many places gravel, class 3. Section 36 is class 2. The east line passes over a number of small ridges. The cart trail from Qu'Appelle to Fort Walsh crosses Section 13, also, that to Wood Mountain enters by Section 25. Sections 31, 30, 19 and 18 are hilly prairie, with a sandy loam soil some 6 inches deep on a clay subsoil. The land in Section 13 slopes to the south as far as the south half on Section 7, where it is level. Section 6 is rolling prairie, class 2, the other Sections are class 3.—*A. O. Wheeler, 1883.*
12. *Outlines.*—The northern portion is hilly, the southern portion is heavily rolling, the hills and ridges are gravelly and stony. An alkaline lake is situated on parts of Sections 13, 14 and 15. The Qu'Appelle and Fort Walsh cart trail passes through the township. The soil is a sandy loam on a subsoil of stiff clay, class 3. The western part is a hilly and uneven prairie, with a sandy loam soil, and a few marshes among the hills.—*A. O. Wheeler, 1883.*
13. *Outlines.*—The northern part is nearly level and exceedingly alkaline towards Old Wives' Lake, which occupies the northeast quarter. Southwards the country is somewhat hilly and broken by ridges. The soil varies from a sandy to a clay loam, in most

cases on a clay subsoil. The water is mostly alkaline. The west boundary is nearly level and exceedingly alkaline.—*J. K. McLean, 1882.*

Sub-division.—Is a rolling prairie, composed of a dry sandy soil, with a very limited supply of water which is all alkaline. There is no growth of wood, and Old Wives' Lake covers 6 or 7 of the northeasterly sections of the township. The prairie has a northeasterly slope towards the lake.—*C. F. Leclerc, 1883.*

14. *Outlines.*—The northern portion of the country being a portion of the Coteau du Missouri, is exceedingly hilly, with ponds of both fresh and alkali water, and is third class agricultural land. In the south it is nearly level, and exceedingly alkaline towards Old Wives' Lake which occupies the southeast corner. Along the west from Section 31 to 24, the country is very hilly and stony, after which the land becomes nearly level and exceedingly alkaline.—*J. K. Maclean, 1882.*

Sub-division.—Very undulating and hilly in the northern portion; the soil is sandy and gravelly towards the shores of Old Wives' Lake, which covers Sections 1 to 4 and 9 to 12. Fresh water is found in the swamps and alkaline water in the lake and some of the marshes. The township is mostly suitable for stock-raising, but there is no wood whatever on it. Towards the southwestern corner, Old Wives' Creek traverses Sections 5 and 6; it is a stream about 70 feet wide and 4 feet deep, with a current of about 5 miles an hour towards the lake. The land of this township being a portion of the "Coteau du Missouri" is exceedingly hilly, with intervening ponds of fresh and alkaline water, and can only be termed class 3.—*C. F. Leclerc, 1883.*

15. *Outlines.*—The north, south and east boundaries are exceedingly hilly, with both fresh and alkaline water; the surface and soil only rank third class.—*J. K. Maclean, 1882.*

Along the west boundary the surface is high and very broken. The alluvial soil is generally 3 to 4 inches deep on a subsoil of clay or clay and gravel, class 3. Ponds, marshes and sloughs are well distributed throughout the township.—*J. J. McArthur, 1882.*

Sub-division.—The surface is undulating, sandy and gravelly, has good water throughout, but no wood; it is unfit for agricultural purposes and is only suitable for pasture. Though there is very little good land this township is very well adapted for sheep-raising, owing to the good hay swamps and the good water in the marshes.—*C. F. Leclerc, 1883.*

16. *Outlines.*—The northern boundary crosses a ridge in the second Section; also a number of small creeks and a pond in Section 33. The soil varies between a reddish brown clay and clay loam; the subsoil generally clay.—*T. Fawcett, 1882.*

South and east, the country is exceedingly hilly, with ponds of both fresh and alkali water, and third-class land.—*J. K. McLean, 1882.*

The western sections are dry and level, except 30 and 31, which have some marshes.—*J. J. McArthur, 1882.*

Sub-division.—Broken and hilly, soil sandy and dry; the

land can only be called third-class and is mostly adapted for pasturage. In the lower levels, however, there is some good farming land, traversed by small creeks, together with some ponds and marshes, in all of which the water is good.—*C. F. Leclerc*, 1883.

- 17. Outlines.**—From the foot of the “Coteau” in Section 1 to Section 13, it is upon gently rolling prairie, with a soil of clay loam to heavy clay, class 1. A large marsh occurs on Sections 12 and 13. From Section 13 to 36 it is open rolling prairie, rising to the north with a very sandy loam soil and a few marshes. Along the northern boundary, in Section 31, is an alkaline lake; the remaining northern Sections are a very sandy loam, class 3. All open rolling prairie. The west is high rolling prairie.—*F. W. Wilkins*, 1882.

In the south the soil varies between a reddish brown clay and clay loam on a subsoil of clay.—*T. Fawcett*, 1882.

Sub-division.—The C. P. R. track traverses Sections 25 to 30, through an open level prairie, which has a soil of sandy loam, class 2. Southward of the next adjoining sections, the surface gradually merges in a very rough and broken country, the land in the valleys of which is excellent, and there is good water in many places, fed from springs proceeding from the hills; otherwise most of the water is alkaline. Alkaline ponds abound in the extreme northeast. In Section 31 the soil consists of an alkaline sandy clay.—*C. F. Caddy*, 1883.

- 18 Outlines.**—The north boundary lies in an open rolling prairie. Soil, in Sections 31 and 32, an excellent sandy loam, class 1; balance of line is almost pure sand, class 4. Along the east boundary it is open rolling prairie. Soil, from Section 1 to 25, a loamy sand of great depth; Section 25, a saline sandy clay, with numerous alkaline ponds; Section 36, almost pure sand, class 3; Sections 2, 3 and 4 have slight rolling hills; Section 1 is sandy.—*F. W. Wilkins*, 1882.

Sub-division.—Main features somewhat similar to Township 18, Range 1. Soil, a light sandy loam. Surface much broken by a high sandy ridge across the township in a northwest direction. There are a few ponds of good water and some alkaline ponds scattered throughout the township, and some large marshes in Sections 22 and 27. Section 25 is a saline sandy clay soil and has numerous alkaline ponds. Section 26 is almost pure sand. Along the western boundary north to Section 18, the soil is a gravelly loam, class 3; from here to the north it is a clay loam with a few fresh ponds, class 2. A large saline pond occurs on 30. In the north, Sections 31 and 32 are excellent sandy loam soils, and are class 1; 33 to 36 are almost pure sand, class 4.—*C. F. Caddy*, 1883.

- 19. Outlines.**—On the east boundary, a slow and marshy creek, which empties into Pelican Lake, crosses Section 24, in a valley flanked by sandy ridges. Soil, in Sections 1 and 12, almost pure sand, class 4. Many stones on Sections 13 and south half of 24; soil, clay loam, class 2. The north half of Section 24 and Section 25

are a bed of stones. Section 36, soil a sandy clay of considerable depth, class 2. The southern boundary Sections 6 and 5 are a good sandy loam, class 1; the rest of the line eastwards is very sandy. The north boundary, from Section 31 to the east half of 33, is a good sandy loam, class 1. Balance of line is a sandy and gravelly loam and very stony, class 3. Thunder Creek crosses Sections 31 and 34. The west line from Section 6 to the north half of 18 is an excellent sandy loam soil, thence northwards it is a strong sandy clay—all class 1. On all the lines the surface is rolling prairie.—*F. W. Wilkins*, 1882.

Sub-division.—Generally, the soil is a sandy loam and good land; it is good for dairy purposes towards the north-east, where Thunder Creek passes. In the valley of the Creek fair building stone is obtainable, and the soil consists of a light clay loam. On the north boundary of the township, from Section 31 to the east half of 33, the soil is a sandy loam and class 1; eastward from 34, the soil is a sandy, gravelly loam and very stony. Thunder Creek crosses 34 in a diagonal direction. Along the western boundary, the soil is all class 1; from Section 6 to 13 it is a sandy loam, and northwards, strong sandy clay. The soil of Sections 1 and 12 is almost pure sand, class 4. Sections 13 and south half of 24, clay loam, class 2; the north half of 24 and 25, a bed of stones. There is a long lake, bearing north and south through sections 4, 5, 8, 17 and 20, with excellent water and good grass for stock, and there are small ponds of good water scattered throughout the township.—*C. F. Caddy*, 1883.

- 20. Outlines**.—Along the north boundary there is an excellent soil of clay or sandy loam, and good water in the ponds and the marshes. Rolling prairie.—*E. Bray*, 1882.

On the east boundary, the soil is a dry sandy clay, class 2, with a few small ponds. The west Sections 6 to 18 are fair sandy loam, class 2. The north halves of Sections 18 and 19 are a very dry sandy loam, class 2. Southwards, Sections 1, 2, 3, and the east half of 4, are stony and class 3; the balance of the line is class 1. All the country is open rolling prairie. The west boundary lies over open gently rolling prairie. Section 6 and along to half way through 28, is a fair sandy loam, class 2. The north half of 18 and the next Section are a hard sandy loam and very stony, class 4. Sections 30 and 31 are a very dry sandy loam and class 2.—*F. W. Wilkins*, 1882.

Sub-division.—Soil, clay loam and sandy clay, generally class 2. There are a few stony ridges in this township, but the soil is good and the stones easily moved; marshes with good hay and ponds with good water abound throughout the township. The valley of Thunder Creek renders to Sections 4, 5, and 6, and parts of 3, 8, and 7, similar features as described in Township 19. The north of this valley is flanked by a series of sandy ridges.—*C. F. Caddy*, 1883.

- 21. Outlines**.—The southern portion is fine rolling prairie, having an excellent soil of clay or sandy loam and good water. *E. Bray*, 1882.

The north and east are rolling prairie, with an alluvial soil of about 4 inches deep on a subsoil of sand, class 2. Section 35 is knolly and broken by the Eyebrow Hills, which rise about 125 feet. There are marshes in Sections 34, 32, and 31. Along the easterly tier of Sections water is scarce.—*C. C. Rainboth*, 1882.

Along the western side, the surface is undulating and level prairie, having a good sandy loam soil. Sections 30 and 31 are rather poorer than the rest of the line. There are several marshes, and an old trail crosses Section 31.—*E. J. Rainboth*, 1882.

Sub-division.—The prairie is somewhat broken, but the hills are few and insignificant, and interspersed with a few good marshes, where there is good water and an abundant growth of hay. The soil is a clay loam and well adapted for grain and agriculture. There is no wood of any kind.—*C. F. Caddy*, 1882.

22. *Outlines.*—In the vicinity of the north, east and south boundaries, the surface consists of rolling and undulating prairie. Northwards the soil is a sandy loam of an average depth of 4 inches, on a clay and sandy subsoil, class 2. Sections 35 and 36 are rather broken. In 35 there are two coulees from 50 to 125 feet deep. In 36 there is a large marsh. Eastwards the soil is from 4 to 6 inches deep on a sand subsoil, class 2. A few coulees occur here and there. Between 25 and 36 the land slopes from a height of 125 feet towards the Qu'Appelle valley. Southwards the soil is second class. Parts of Sections 2 and 3 are knolly and broken by the Eyebrow Hills, which rise to a height of 125 feet. There are marshes in Sections 3, 5 and 6.—*G. C. Rainboth*, 1882.

Westwards, rolling prairie. Soil, Sections 6, 7, 18 and 19 are gravelly loam, class 2. Section 30 is gravelly loam, class 3, and broken by a creek and valley. Section 31 is a sandy loam and class 1.—*E. J. Rainboth*, 1882.

Sub-division.—There is a large quantity of excellent land in this township, which is nearly level, to the north of a broken ridge which extends from Section 30 in a south-easterly direction to Eye Lake in Sections 11 and 2. This plain contains a fine clay loam soil of 7 to 10 inches on a clay subsoil and is mostly class 1; there are no ponds. South of the ridge and west of Eye Lake, the country is much broken, but good, and consists of a clay loam soil free from stone. On Section 5, ponds of good water occur and some small springs; but water is scarce elsewhere, except by digging. Some boulders and fragments of sandstone are scattered through these valleys. Section 36 is broken by the marshy shore and valley of Sandy Lake. Moose Jaw trail crosses the township.—*C. F. Caddy*, 1883.

23. *Outlines.*—Generally on the outlines, undulating and rolling prairie. The soil is a sandy loam of 3 to 5 inches deep, on a sandy and clay sub-soil, class 2. In Section 32 a small swift creek flows southwards. Section 31 is rolling sand hills, in places covered with willow scrub. In the south half of Section 1, the land slopes to Sandy Lake, which, with the Qu'Appelle marsh, breaks

this Section. Sections 1 and 2 are broken; in the latter there are two deep coulees. The Qu'Appelle River crosses the west line in Section 30. This stream is about 60 feet wide, 4 feet deep and slow. The northern slopes are here dotted with poplar and willow. There is a range of hills in the extreme north of Section 19, but the rest of it is level or undulating.—*G. Rainboth*, 1882.

Sub-division.—Is an undulating prairie; soil, sandy loam on a sandy subsoil, good farming and grazing land. The low land is good for farming; but the high land is fit only for grazing. Sandy Lake, covering about 1,600 acres, reaches from the south-east corner to Section 22, and the Qu'Appelle River and Valley reach from there to Section 30. The lake and river are bordered with marsh, and a small growth of wood appears on the banks towards the west. The trail to Moose Jaw crosses Sections 5 and 6.—*J. Bourgeois*, 1883.

24. *Outlines*.—Sections 30 and 31 are undulating and class 3; in the former is a small slough and a lake. Sections 18 and 19 are in the sand hills, which are covered in places with willow brush. In 18 are small ponds and alkaline spots. Sections 7 and 6 are undulating and class 4. The southern sections, 1 to 5, are undulating with a sandy loam soil 4 to 5 inches deep, and are class 2. In Section 5 a swift creek flows southwards. Along the east it is rolling prairie with a sandy loam soil 3 to 5 inches on a sandy subsoil sometimes mixed with clay, class 2, and rather dry, except two marshes in Sections 13 and 24.—*G. C. Rainboth*, 1882.

The north is open rolling prairie and good land. There are a few marshes.—*E. Bray*, 1881.

Sub-division.—Is a rolling prairie, good for farming purposes on the lower levels, but for the most part only fit for grazing. Large sand hills covered with brush and willows occupy Sections 7, 8, 9, 16, 17, 18, 19, 20 and 30—some in part, some altogether—and surrounding a lake which covers portions of 8 and 17.—*J. Bourgeois*, 1883.

25. *Outlines*.—Rolling open prairie. Good land, class 2. In Section 3, line crosses a ravine about 30 feet deep. Several marshes along this line.—*E. Bray*, 1881.
26. *Outlines*.—Open rolling prairie. A small slough was crossed in Section 32. Sandy loam soil.—*C. E. Fitton*, 1883.

Rolling prairie. Sandy loam soil 4 to 8 inches deep, with sand and clay subsoil, class 2. Water in small quantities along the line.—*J. A. Maddock*, 1883.

27. *Outlines*.—Along the north and south boundaries the surface is an open rolling prairie. Water generally was scarce, a small slough being crossed in Section 5, and a pond in Section 35.—*C. E. Fitton*, 1883.

Along the western boundary it is rolling prairie, with a sandy loam soil about 6 inches deep on a clay subsoil, classes 2 and 3. A couple of ponds were crossed on this line.—*J. A. Maddock*, 1883.

Sub-division.—Is an open rolling prairie without wood; soil, chiefly sandy clay with here and there sand and gravel, which may be rated first and second class for agricultural purposes. There is a large alkali slough in the southern portion, also a deep gully.—*C. E. Fitton*, 1883.

- 28. Outlines**.—South, open rolling prairie. Water scarce; was only seen in Section 2.—*C. E. Fitton*, 1883.

The north is high rolling prairie, and interspersed with a few grass swamps, the waters of which are generally fresh.—*T. Kains*, 1882.

Westwards, rolling prairie; gravelly soil about 6 inches deep, with clay subsoil, class 3. Water scarce.—*J. A. Maddock*, 1883.

Sub-division.—Is an open rolling prairie without wood; has a soil of sandy clay and sand, and would rate 2 and 3. There are a few small sloughs in the township.—*C. E. Fitton*, 1883.

- 29. Outlines**.—On the south boundary the country is high rolling prairie, inclined in places to be hilly, and interspersed with a few fresh grass swamps.—*T. Kains*, 1882.

Along the west boundary it is rolling and undulating, and in some places hilly. Soil from 2 to 18 inches deep on a clay subsoil, class 2. Good water. A creek, 1 chain wide and 18 inches deep, flows across Section 7; another, about 2 chains wide and 2 feet deep, flows slowly west across Section 19.—*D. C. O'Keeffe*, 1882.

Open prairie, generally rolling. The soil, a sandy loam, is good in places and can be classified as varying from $1\frac{1}{2}$ to 3rd rate. Water, though abundant, is in less quantity than in Township 29, Range 1. Eastwards rolling and undulating; numerous sloughs, and in Section 25 a pond of clear water.—*J. I. Dufresne*, 1884.

- 30. Outlines**.—Along the west boundary it is hilly, clay loam soil 15 to 18 inches, clay subsoil. Water scarce in Sections 6, 18, 19, 30 and 31. Some good water in Section 7.—*D. C. O'Keeffe*, 1882.

Generally it is open hilly prairie, and the soil a good sandy loam. Water is plentiful and met nearly always in the form of sloughs and marshes.—*J. I. Dufresne*, 1884.

- 31. Outlines**.—Along the west boundary it is rolling prairie, clay loam soil from 8 to 18 inches deep on a clay subsoil. Water good. Occasionally lime. Stone gravel occurs.—*D. C. O'Keeffe*, 1882.

Generally it is open hilly rolling prairie of a good light sandy loam soil. Lakes are neither so numerous nor so large as in township 31, range 1. The south western part of this township is rather dry.—*J. I. Dufresne*, 1884.

- 32. Outlines**.—The north is rolling prairie, in some places very hilly and broken; soil, 5 inches deep on a gravel and clay subsoil, classes 2 and 3. Sections 32 and 33 are broken by large ponds. A few small streams cross the north line.—*C. A. Biggar*, 1882.

The west is rolling prairie, clay loam; soil from 16 to 18 inches on clay subsoil, sometimes mixed with gravel, generally class 2. The water is good.—*D. C. O'Keeffe*, 1882.

Generally it is open rolling prairie of a good light sand loam soil. This township appears to be very dry.—*J. I. Dufresne*, 1884.

- 33. Outlines.**—A cart trail traverses the southern tier of Sections. These Sections are rolling prairie, sometimes hilly and broken; soil, 5 inches deep on a subsoil of gravel and clay, classes 2 and 3. Large ponds on Sections 4 and 5, and a few streams elsewhere.—*C. A. Biggar*, 1882.

Has a range of sand hills across the southern portion, the northern part of the township being open, rolling prairie; the soil is light and sandy. The water in the lakes is slightly alkaline. A large lake submerges portions of Sections 19 and 20. There is no wood of any kind.

Sub-division.—Northwards, the soil lies from 10 to 12 inches deep on a sandy subsoil and is class 2. Sections 35, 36 and 34 are level prairie with a good soil on a clay subsoil, class 1. Sections 31, 32 and 33 have a sandy subsoil and are class 2. Cart trails cross the boundaries in Sections 31 and 1. The general surface of the township is rolling, and water is scarce in the north half. In the east, the soil lies 4 to 20 inches deep on subsoils of sand, gravel and clay, class 3.—*T. Byrne*, 1882.

- 34. Outlines and Sub-division**—Along all the boundaries it is good, level and rolling prairie. The soil lies from 6 to 20 inches deep on a clay and sand subsoil in the southeast half, and a clay subsoil in the northwest half. Water generally is scarce, except a moderate supply on the western side. A considerable lake submerges portions of Sections 7 and 18, and a smaller lake lies between Sections 15 and 16. A large alkaline marsh occurs in the north of Section 32. The township throughout is rolling prairie, having several lakes and a good scattering of ponds and marshes, the water of which is brackish. There is no timber. The alluvial soil is from 4 to 20 inches deep.—*T. Byrne*, 1882.
- 35. Outlines and Sub-division.**—The boundaries are generally rolling and level, with a fair soil 18 to 20 inches deep, on a clay subsoil and well up to class 1, except on the west line where it is class 2. Along the boundaries, south and west, and in the northeast, water generally is scarce. The general features of the township, obtained in sub-dividing it, shew it to be rolling prairie with a clay loam soil, which is strongly impregnated with alkali. There is a chain of broad alkaline lakes and marshes traversing the township from southeast to northwest. On this chain are two large lakes, one of which submerges portions of Sections 31 and 32, and another parts of Sections 20 and 21. There is no wood.—*T. Byrne*, 1882.
- 36 Outlines and Sub-division.**—The west is rolling prairie; soil about 18 inches deep, with a clay subsoil, class 2. Water is scarce. The easterly Sections 36, 25 and 24 are rolling, while 13, 12 and 1 are level prairie. Soil is from 18 to 20 inches deep, with sand and gravel sub-soil, class 1. Water is plentiful in marshes. Southwards, with the exception of a lake in Section 5, water is scarce. Throughout the township it is rolling prairie, the northern and western parts inclined to be hilly. The soil in the hills is inferior,

being sand and gravel, but that to the south and east is a clay loam of fair quality. The whole township is broken by numerous fresh water ponds and marshes. There is no wood of any kind.—*T. Byrne, 1882.*

- 37. Outlines.**—About the centre of this township it is open and rolling, class 2, with numerous ponds, marshes and small lakes. Near the west boundary there is a valley about 100 feet deep, which is swampy in the bottom.—*J. S. Dennis, jr., 1878.*

Outlines and Sub-division.—The north boundary is level prairie, with many small lakes. Soil from 4 to 15 inches deep; subsoil generally loam with rocks in some places, classes 1 and 2. A large alkaline lake extends over large portions of 18, 19 and 30. In Section 31 there is a lake of good water. The soil in the vicinity of the lakes is 3rd and 4th class. Eastwards, the surface is undulating, with many fresh marshes. Soil, 8 to 12 inches deep on a subsoil of sandy loam, classes 2 and 3, with a small quantity of class 1. Generally it is rolling prairie, but owing to the great number of lakes and ponds is not well adapted for farming. As many of the lakes, however, are fresh water, the township could be utilized for stock raising. There are occasional bluffs of small poplar fit for fuel.—*S. M. Starkey, 1882.*

- 38. Outlines and Sub-division.**—The land adjacent to the western boundary is level, with an A1 soil 14 to 17 inches on a loamy subsoil. Northwards, the Edmonton trail crosses Sections 31 to 34. These Sections and 35 are level and rolling, with a good sandy loam soil ranking classes 1 and 2. Section 36 is in the sand hills. The soil along the south and east boundaries is from 4 to 15 inches deep, and generally classes 1 and 2. Rocks are found in places, and there are many lakes of good water. Except a long narrow lake, diagonally traversing Sections 21, 27 and 35, the north half of the township has comparatively few lakes. The Edmonton trail crosses here. Generally throughout, the township is undulating prairie, but contains numerous lakes and ponds, some of which are fresh water and others brackish. The soil is fairly well adapted for agricultural purposes, but there is no wood of any kind.—*S. M. Starkey, 1882.*

- 39. Outlines and Sub-division.**—The east, west and north boundaries are level prairie; soil 6 to 8 inches, with a sandy loam subsoil, class 1. Several marshes were crossed. The telegraph line and cart trail to Edmonton crosses the east line in Section 1, from thence the line crosses to Section 6 and the trail to Section 3. Water generally is scarce. Sections 6, 5, 4 and 3 are level prairie; Section 2 is rolling; Section 1 is in the sand hills. Generally it is undulating prairie, with some surface stones on the east side, but as a whole, is well adapted for agricultural purposes, having an alluvial soil of good depth, with very little surface water. Wood is scarce, the township being entirely destitute, with the exception of Section 1.—*S. M. Starkey, 1882.*

- 40. Outlines.**—Along the north boundary it is level prairie to the bank of the river, which has considerable timber in its valley.

The soil is sandy. A few ponds occur.—*G. B. Abrey, 1882.*

Outlines and Sub-division.—The boundaries of this township consist generally of level prairie, having a soil about 11 to 20 inches deep on a loam subsoil, class 1. A large coulee crosses Section 4. The South Saskatchewan River crosses Section 31. The Edmonton trail, Sections 7 to 34. Generally the surface is dotted here and there with poplar and willow bush. A lake crosses the south half of Section 24, and the east half of 13, and water is plentiful except along the southern boundary. Throughout the township the land is level or undulating prairie of good quality. Small bluffs of poplar are scattered through the northwest, and contain sufficient wood for the immediate wants of settlers in the way of fuel, and a limited supply of fence rails. The water found in the sloughs and ponds is generally fresh and good.—*S. M. Starkey, 1882.*

41. *Outlines.*—South is generally a level prairie, except along the river. The soil is sandy, with a few ponds showing. Considerable poplar timber was found along the banks of the river.—*G. B. Abrey, 1883.*

Outlines and Sub-division.—Generally on all the boundaries the surface is undulating and dotted with poplar and willows. The soil is class 1, and lies about 10 inches deep on a loam subsoil. A trail crosses the north line in Section 35, and there is not much water on this line. On the west boundary the soil is class 1 and 2. Some portions are very wet, and a lake was crossed in Section 30. Along the eastern boundary the soil is class 2. A stream 10 feet wide and about 4 inches deep, flowing east, crosses the line in Section 1; another 60 links wide, and one foot deep, with a slow current, crosses the line in a northwesterly direction on Section 13. This stream has heavy woods on its south bank. The Prince Albert trail crosses the line in Section 24. The township is divided into two nearly equal parts by the south branch of the Saskatchewan, which crosses it diagonally from southwest to northeast. There is a lake in Sections 30 and 31, besides a few small ponds and sloughs. On the south of the river the land is clay, of good quality; on the north it is a sandy loam, changing to gravel in the southwest corner. The banks of the river are wooded, and there are some patches here and there throughout the township, but altogether there is barely enough to supply settlers with firewood. It is on the whole, an excellent township, and well adapted for agricultural purposes. It is also suitable for stock farming as there is a quantity of rich grass in the northern portion.—*C. Carroll, 1882.*

42. *Outlines.*—Along the southern and the eastern boundaries, the surface is undulating, except in close proximity to the river. The alluvial soil lies from 4 to 10 inches deep on a clay subsoil and is class 1. The Saskatchewan River passes through the easterly portions of Sections 1, 12 and 13, and the line of the eastern boundary crosses the river four times in these three Sections. Along the southern boundary, there is not much water, except in Sections 4 and 5, where two lakes—one of considerable area—

occur. Trails, going north and south, cross Sections 2 and 5.—*C. Carroll*, 1882.

The east boundary, from the Saskatchewan River northwards to the correction line, consists of prairie land, which is nearly all class 1, and supporting a scattering of small poplar.—*J. L. Reid*, 1879.

Sub-division.—This township consists of gently rolling prairie land. The south-east half has a sandy soil which has large clumps of poplar and willow upon it. The northwest half is a clay loam soil, and the growth of wood is very scattering, small and brushy, but there is more surface water in ponds or lakelets and marshes. The Saskatchewan River, however, flows through the south-east, entering on Section 1 and leaving on Section 13. Two trails, to the north, cross the township.

43. *Outlines and Sub-Division*.—Rolling prairie generally, with clumps of willow and poplar. Soil, classes 1 and 2. The west line crosses Duck Lake in Sections 30 and 31; good hay and marsh land along this line. The eastern part of the southern boundary is rolling and sandy, but towards the west becomes level, classes 1 and 2. Trail, Duck Lake to Dumont's, crosses the line in Section 1. Cart trails cross the eastern line in Sections 36, 25, 24 and 13; the trail to Batoche Ferry being in Section 24. Water scarce east and south. In the north there are scattered poplar and willow; soil, class 1. Duck Lake with its overflow surface covers at least five of the northwest Sections. The soil is a light sandy loam. There is abundance of wood, hay and water. Well adapted to stock-raising. At the time of survey, 1879, quite a number of settlers were here. The St. Laurent Settlement Reserve and the Saskatchewan River are a few miles east.—*J. L. Reid*, 1879.

- 43A. *Sub-division*.—This is a fractional township of 18 Sections. Sections 1, 12 and 13 are rolling, with large clumps of poplar and a sandy soil. The south half of Section 14 and the north half of 11 are composed of broken sand hills, with poplar clumps and some large timber. The western portion is a gentle rolling prairie, with a sandy loam soil—generally 10 inches deep—on a clay and sandy sub-soil, and is very suitable for agriculture or grazing. On Sections 6 and 7 there is an alkaline lake in a depression about 20 feet below the surrounding surface. This township is crossed by a number of trails and has some settlers to the north-east.—*H. W. Selby*, 1883.

44. *Outline*.—Northwards, open and rolling country, dotted in places with poplar, second growth poplar, hazel under-brush and a few willows. The soil is light. A few marshes.—*W. F. King*, 1878.

Sub-division.—This township is well adapted for settlement, and much of it has been already taken up by settlers. There is plenty of timber and a number of small lakes containing good water. The soil is a sandy loam, rather light in quality. Duck Lake occupies Sections 5 and 6, and the entire westerly tier of sections are taken up by an Indian Reserve. Being fairly settled and in the proximity of the St. Laurent Settlement and the Sas-

katchewan River, it is the centre of a number of trails.—*J. L. Reid*, 1879.

45. *Outlines*.—Southwards this township is rolling prairie. The soil is light and sandy and scarcely above class 3. The surface is covered in many places with scattered clumps of poplar and some willow. Directly on the line there is very little surface water, except on the most easterly section.—*W. F. King*, 1878.

Eastwards the surface is undulating with a sandy soil and class 3. There is hazel, willow and small poplar in considerable quantities, and poplar, spruce and pitch-pine from 6 to 14 inches in diameter, also a little tamarac. There were also several good ponds and marshes.—*R. Rauscher*, 1878-9.

Sub-division.—The soil is of a light sandy nature and of poor quality, and almost unfit for agricultural purposes. It is chiefly covered with poplar, pine and willow, with here and there broken patches of prairie. Along the banks of the lakes are found spruce and tamarac, which have been culled out to some extent. There are two large lakes, one of which stretches nearly across the entire township, and covers probably 1,500 acres.—*L. Patrick*, 1882.

46. *Outlines*.—This township has a sandy soil, with poplar, pines and willows, and also, some small spruce and jack pines. There are several grass muskegs and swamps.—*W. F. King*, 1878.

Sub-division.—Has an inferior soil of a light sandy nature, interspersed with sloughs and marshes and covered with poplar, willow and jack pine. The north-easterly sections are to a large extent, covered by lakes of considerable areas. The southern line of sections are broken by three lakes. The country along the east is well timbered and there is abundance of water. The east is well timbered and clear water is abundant. Section 1 has a small creek and there is a trail in Section 12. A large lake covers the greater part of Section 24.—*L. Patrick*, 1882.

47. *Outlines*.—Is well timbered with poplar, willow and pine, with some jack pine and spruce. The soil is sandy and the marshes generally fringed with willow.—*W. F. King*, 1878.

Eastwards, undulating and rolling; land sandy and 3rd class. Poplar 6 to 12 inches, and spruce 8 inches, abound. Good water plentiful, and there is a good deal of willow and birch brush.—*R. Rauscher*, 1878.

Sub-division.—The South Saskatchewan, half a mile wide, flows through the north-west corner. The soil to the north of the river is light and sandy and unfit for cultivation, and much of it is a large tamarac swamp. The rest of the township is covered with jack pine suitable for fuel and fencing, and has a light and sandy soil of not much use for cultivation. The Carleton and Prince Albert trail passes through 19, 29 and 33. Some large sloughs occur in the southeast corner. The general surface is level, except the east side of Sections 12, 13, 24, 25 and 36, where it is very hilly.—*L. Patrick*, 1882.

48. *Outlines*.—Surface is of a very heavy rolling character, with numerous small lakes and sloughs; water generally good and fit

for drinking. Soil is a sand of a very inferior quality, heavily timbered with pine, from 2 to 12 inches in diameter, thickly covered with limbs, of a hard and gummy nature and consequently, nearly useless for anything but fuel. There are small clumps of spruce on Sections 31 and 34. Along the north the surface is broken by numerous sloughs and grass marshes, generally fringed with poplar. The subsoil is sand, class 4. Pine from 6 to 8 inches in diameter; poplar, birch, willow, tamarac and spruce are to be found. A large marshy lake, with open water towards the north, extends over the greater part of Section 31. Portions of the country along this line are very hilly.—*A. G. Cavana*, 1882.

Sub-division.--The North Saskatchewan River divides this township diagonally from Section 5 to 36; it has steep high banks. The soil northwest of the river is light and sandy and the surface is very hilly, interspersed with deep muskegs, and also a large tamarac swamp; the timber is chiefly jack pine suitable for fuel and fencing. This portion is fit only for grazing. On the south-east of the river Sections 22, 23, 24, 25 and 26 are fair for agricultural purposes; the soil is a light sandy loam covered with poplar in some places, and the rest of the township is much like that on the other side of the river, but not nearly so wet. Along the banks of the river there are a few large trees suitable for building. On the west boundary water is plentiful with some wood, while eastwards wood and water are both abundant.--*L. Patrick*, 1882.

TOWNSHIPS WEST OF THE THIRD INITIAL MERIDIAN.

RANGE III.

- 9. Outlines.**—Easterly portion rolling prairie, westerly portion hilly, with gravel, stones and boulders on the hills and in the hollows. A large alkaline pond is situated on parts of Sections 7 and 18. The Wood Mountain trail passes through the centre of the township. Soil, sandy loam with brown or white clay sub-soil. Classes 2 and 3; suitable for agricultural purposes.—*A. O. Wheeler*, 1883.

Along the south boundary the surface is more rolling and broken; the soil is first class, and fresh water marshes are abundant.—*T. Fawcett*, 1882.

- 10. Outlines.**—Rolling prairie. Soil, sandy loam with heavy clay sub-soil, class 2. The trail from Wood Mountain to Qu'Appelle passes through the south-east corner. Though generally dry, it is suitable for agricultural purposes. Eastwards, soil sandy loam, with a clay subsoil, class 2. Water is scarce, only one slough lying in Section 1.—*A. O. Wheeler*, 1883.

- 11. Outlines.**—Very hilly in the north-eastern part, with gravel, stones and boulders on the hills. Rolling very heavily on the north-western part, with gravel and a few stones on some of the ridges. Rolling prairie in the southern portion. Soil, sandy loam with stiff clay subsoil, class 3. The Qu'Appelle and Fort Walsh cart trail crosses the north-west corner. Sections 36, 25, 24 and 13 are hilly prairie. Section 13 slopes gradually to the south, as far as south half of 12 where the land becomes level. Section 1 is rolling prairie, class 2.—*A. O. Wheeler*, 1883.

- 12. Outlines.**—The north half is hilly, with gravel and stones on all the hills. Sloughs are numerous, but usually dry up in summer. The south half rolls very heavily and unevenly, being much cut up by ravines and gulleys running westerly to "Old Wives Creek." The Fort Walsh and Qu'Appelle trail crosses the south-east corner. Soil, sandy loam; subsoil, clay; class 3.—*A. O. Wheeler*, 1883.

The country is somewhat hilly and broken by ridges; soil varies from sandy to clay loam, on a clay subsoil. Water mostly alkaline.—*W. T. Thompson*, 1882.

- 13. Outlines.**—The south boundary is somewhat hilly and broken by ridges; soil sandy and clay loams, generally on a clay subsoil. Water mostly alkaline.—*W. T. Thompson*, 1882.

The eastern boundary is undulating, with a few small ponds, which dry up early in the season. Section 36 is crossed by Old Wives' Creek.—*J. K. McLean*, 1882.

Old Wives' Creek, slightly alkaline, traverses the township diagonally, but very circuitously, from the south-west to the

north-east corners. The land, mostly high and very undulating, slopes on either side towards the creek, which, as it approaches Old Wives' Lake, runs through an alkaline clay flat. There is a narrow, broken belt of wood along the creek. The soil is a sandy loam of moderate depth, with clay subsoil. Sections 35 and 36 are an alkaline flat. A cart trail crosses from Sections 19 to 33. Along the north and west boundaries, the surface is undulating.—*J. J. McArthur*, 1882.

Sub-division.—Is an undulating prairie with a sandy soil of a third class character. There is some good sandy land along Old Wives' Creek, and wood suitable for fuel in Sections 6 and 8. Old Wives' Creek enters at Section 6 and leaves at 36; has a width of from 1 to 200 feet, and a depth of from 4 to 6 feet; the water is slightly alkaline. There are a few swamps in the township, but most of them are dry.—*L. M. de Chesne*, 1883.

14. *Outlines*.—Sections 24, 25 and 36 are rolling, with a 5 to 8-inch soil on a clay subsoil, class 3. There are several ponds of fresh water. Sections 1, 12 and 13 are an alkali clay flat, class 3. Old Wives' Creek crosses twice into Section 1; it has no current and has banks about 6 feet high.—*J. K. McLean*, 1882.

An alkaline creek, flowing in a north-westerly direction through an alkaline clay flat, traverses this township almost diagonally and connects the Old Wives' Lakes. The land on either sides is very high and broken and of a poor quality. Sections 33 to 36 are high and undulating. Sections 31 and 32 are a low alkali flat, with clay subsoil. All class 3. A few marshes were crossed in the above sections. The south and west boundaries are undulating, 3 to 6 inches deep, on a clay subsoil, class 2. Sections 1 and 2 are large alkali clay flat; class 3. A cart trail crosses in Sections 1, 2, 3 and 4. Water not plentiful. Section 18 is a little sandy.—*J. J. McArthur*, 1882.

Sub-division.—The north-east half of this township is high sandy land, is broken and has only a 3rd class soil. An alkaline creek runs to Old Wives Lake, in a north-westerly direction from Sections 12 to 31; it has a depth of 3 to 4 feet; is from 60 to 120 feet wide. The north-westerly portion of the township is low and good for cultivation; but generally speaking three-quarters of this township is class 3, and very little adapted for agricultural purposes.—*L. M. de Chesne*, 1883.

15. *Outlines*.—Along the west, north and east the surface is high, undulating, and, in places, broken. Alluvial soil, from 3 to 6 inches deep, with clay and sand subsoil; class 3. Old Wives Lake, the water of which is alkaline, extends over parts of Sections 7 and 8. The east half of Section 6 and the west of 5, is an alkaline flat. Section 1 is very much broken. Water is plentiful in marshes and sloughs along the east. Throughout this township the land is very high and broken, and dotted with many small lakes and ponds, many of which are alkaline. The soil is of poor quality.—*J. J. McArthur*, 1882.

Sub-division.—High land and very broken. There are a few alkaline swamps, most of them dry; an alkaline creek enters at

Section 5 and leaves at 7. This township is class 3, and ill-adapted for agricultural purposes.—*L. M. de Chesne*, 1883.

16. *Outlines*.—This township is high and very broken, with many marshes and alkaline lakes. The soil is of a poor quality.—*J. J. McArthur*, 1882.

On the north boundary a ridge which seems to be the main divide of the Coteau's drainage is crossed in Section 33. A small one exists between this and Range 4, and from this the surface gradually descends to Old Wives' Lake.—*T. Fawcett*, 1882.

Sub-division.—High and very broken country, sandy and gravelly, and on the ridges stony. The soil generally is class 3, and unfit for cultivation. There are a number of alkaline ponds and there is no wood.—*L. M. de Chesne*, 1883.

17. *Outlines*.—The northern sections are hilly and broken. Soil, sandy loam and somewhat gravelly on the knolls; rated second and third class. Good grazing lands, as there is a rich growth of grass, but too hilly and gravelly to cultivate; sloughs and ponds are numerous, and contain very good water. The west line is not so broken and is dryer than the north.—*J. Dudderidge*, 1882.

Southwards the surface of the country rises from Section 1 to the vicinity of Sections 3 and 4, and then descends. It is rough and has plenty of surface water.—*T. Fawcett*, 1882.

The east boundary from Sections 1 to 24, is in rolling hills, with numerous ponds. Soil, a fair clay loam; class 3. Sections 24 and 25 lie on the escarpment of the "Coteau," which here has an easy descent to the plain. Soil, a fair clay loam; class 2. Section 36 is rolling open prairie; soil, alkaline clay (numerous alkaline lakes are found in this vicinity); class 3.—*F. W. Wilkins*, 1882.

Sub-division.—Is in the "Coteau du Missouri," and is rough, with numerous ponds and marshes. The soil may be rated classes 2 and 3, and consists of sandy loam with clay and sandy subsoils. The pasturage is good and the marshes fresh; but the lakes and ponds are as a rule alkaline. There is no wood. The C. P. R. crosses the north, rendering an easy outlet, but nevertheless the township is not a desirable one for settlement.—*G. C. Rainboth*, 1883.

18. *Outlines*.—Surveyed south and west boundaries, they are hilly and broken, with a sandy soil, gravelly on the knolls and classes 2 and 3. Good for grazing, as there is a good growth of grass and numerous fresh water ponds. The south-east of Section 3 is submerged by a lake.—*J. Dudderidge*, 1882.

Open prairie. Soil, in Section 36, a good clay loam; class 1. Section 35 and the east half of 34 are poor, gravelly and alkaline; class 4. The soil, in the west half of 34 and east half of 33, is an excellent clay loam, class 1. Sections 32 and 31, which are in the hills of the "Coteau," have a good clay loam soil. Tops of hills stony, numerous ponds; class 3. A good sized alkaline lake is crossed in Sections 34 and 35. The east boundary is in open rolling prairie. From Sections 1 to 13, a gravelly loam soil; class

3. From Sections 13 to 36, soil a clay loam, clay subsoil; a few small fresh water ponds. A large alkaline pond occurs on Section 25; class 2.—*F. W. Wilkins*, 1882.

Sub-division.—The western half the township being situate in the "Coteau du Missouri," is hilly and rough, while the eastern half is a high rolling prairie, with a soil of a light sandy loam, on a sandy subsoil and class 3. There are several lakes, ponds and marshes, all of them more or less alkaline. The pasturage is good in early summer, but becomes poor and dried up later on. There are no woods, and altogether the township is not an inviting one for agriculturists.—*G. C. Rainboth*, 1883.

19. *Outlines*.—Is hilly and broken on the south half, and rolling prairie on north half. A small alkaline creek, with slow current, runs eastward in a valley about twenty chains in width, through this township, emptying into Pelican Lake. An alkaline lake in Range 4 is the head of this creek.—*Jas. Dudderidge*, 1882.

The east boundary is in open rolling prairie. From Sections 1 to the north half of 13, an excellent sandy loam soil; class 1. Balance of line, soil a strong sandy clay; class 1. A creek which empties into Pelican Lake, crosses Section 36. The south is rough with some marshes and a saline lake which extends over portions of Sections 2 and 3.—*F. W. Wilkins*, 1882.

Sub-division.—Is a rolling prairie, with a few fresh water sloughs and ponds. Thunder Creek runs through the northern part, and is slightly alkaline. Towards the south the surface is more hilly, being near the base of the Coteau; a large alkaline lake occurs here. The soil is a sandy loam, mostly class 2, and is better adapted for grazing than cultivation.—*E. J. Rainboth*, 1883.

The north boundary is fine rolling prairie, with an excellent soil of clay or sandy loam; good water in ponds and marshes.—*E. Bray*, 1882.

This township is rolling prairie. The land is good and suitable for farming; soil, clay and sandy loam, with clay bottom. Plenty of good surface water.—*J. Dudderidge*, 1882.

20. *Outlines*.—Open, gently rolling prairie. Sections 1 to the south half of 13, a fair sandy loam soil; class 2. North half of 13 and Section 24, soil is a hard sandy loam, and very stony; class 4. Sections 25 and 36, a very dry sandy loam; class 2.—*F. W. Wilkins*, 1882.

Sub-division.—Is a gently rolling prairie, with a few fresh water grass marshes. The soil varies from a sandy to a clay loam, over a clay subsoil, and is rateable as class 2, and is on the whole a fair township for settlement.—*E. J. Rainboth*, 1883.

21. *Outlines*.—Southwards it is fine rolling prairie; soil, clay or sandy loam and excellent in quality. Good water in the ponds and marshes. A lake of 200 acres on Section 2.—*E. Bray*, 1882.

West, east and north, it is undulating and level prairie. Subsoil is sandy loam; class 1. Several marshes were seen in Sections 25 and 36, the land is 2nd class. An old trail crosses the line in Section 36. A large marsh was crossed in Section 30. Section 31 is hilly.—*E. J. Rainboth*, 1882.

Sub-division.—Is a rolling and undulating prairie with a second class soil, composed of sandy loam and sandy subsoil, not well adapted for agricultural purposes, although some of the low lying places are good for grazing. There are some ponds and marshes and no wood.—*F. E. Brunelle*, 1883.

- 22** *Outlines.*—Northwards it is undulating and rolling. Soil 3 inches, sandy and clay subsoil; class 2. A marsh was crossed in Section 35. Qu'Appelle River crosses the north line in Section 31. The river is about one chain wide, from 3 to 6 feet deep, and the current slow. The banks are about 18 feet high.—*G. C. Rainboth*, 1882.

The east consists generally of rolling prairie, with a dry sandy loam soil and class 2. Sections 25 and 36 have heavy rolls in them. The western sections are rolling with a sandy loam soil, and generally class 2, with some rough portions under that grade. Sections 7, 19 and 31 are crossed by creeks flowing to the Qu'Appelle River. These creeks originate in a lake and a marsh on Sections 18 and 19.—*E. J. Rainboth*, 1882.

Sub-division.—Is a township of similar surface, features and soil, as Township 21 of this range.—*F. E. Brunelle*, 1883.

- 23.** *Outlines.*—East it is undulating and rolling. Section 36 is sandy, 4th class. The Qu'Appelle River crosses Section 25, and is about a chain wide and 4 feet deep, with a slow current. All the northern part of the section slopes from 200 feet high towards the river, and is dotted with clumps of poplar and willow. From Section 1 to the northern half of Section 24 is level, when there is a range of hills 180 feet high. Generally southwards the alluvial soil has an average depth of 3 inches, with a sandy and clay subsoil; class 2. The Qu'Appelle River crosses the south line in Section 6. The river is about one chain wide, from 3 to 6 feet deep, and the current slow. The banks are about 18 feet high.—*G. C. Rainboth*, 1882.

Section 31 is very sandy and broken; 30 and 19 are broken by a valley 200 feet deep, containing several creeks in spring and early summer, running to the Qu'Appelle River. Section 19 is broken and burnt prairie; south of this the country is level and sandy, class 2, and without surface water or wood.—*E. J. Rainboth*, 1882.

Sub-division.—Sand hills in the north and the valley of the Qu'Appelle. Southward it is an undulating prairie, with a considerable growth of brush and a soil of sandy loam on a clay subsoil. The Qu'Appelle River crosses in a valley about a mile wide, it is about 20 feet wide and 2 feet deep, with good water and banks of about 70 feet high; a creek joins it from the south with banks 40 feet high and covered with scrub. The sand hills at the north end are covered with willow brush, and there are some poplar 3 to 6 inches in diameter. The Temperance Colony trail passes and is a good road. This township is a good one for grazing.—*J. P. B. Casgrain*, 1883.

Along the north it is rolling prairie, light sandy land; class 3. Water very scarce.—*E. Bray*, 1881.

Sections 31, 30 and 19 are level prairie ; class 2. Sections 18, 7 and 6 are rough and broken, with sand hills covered with brush, ranging from 1 to 7 inches in diameter ; this portion of the township is 4th class. Small quantity of water was found.—*E. J. Rainboth*, 1882.

- 24. Outlines.**—Sections 36 and 25 are undulating, and class 3, the balance southwards is class 4. In Section 25 is a small slough and a lake. Sections 24 and 13 are in the sand hills, covered in places with willow brush. In 13 small ponds and alkaline spots occur. Sections 12 and 1 are undulating.—*G. C. Rainboth*, 1882.

Sub-division.—Is nearly all sand hills, except a portion of the north end which is prairie, with a sandy soil ; all classes 3 and 4. There is a good deal of poplar bush 3 to 10 inches diameter in the sand hills fit for building and fuel. There is also a great deal of scrub willow. There is a scarcity of water, but what there is, is fresh. The township is not suited for farming.—*J. P. B. Casgrain*, 1883.

- 25. Outlines.**—Northwards it is undulating prairie. Soil, black loam about 12 inches deep, with a clay subsoil ; class 1. A cart trail crosses the line in Section 32. Water is not plentiful.—*J. P. B. Casgrain*, 1883.

Generally it is rolling prairie, with a good clay loam soil, and has a plentiful supply of water in small sloughs. Section 6 is level ; the other west sections are rolling prairie. Soil sandy loam, about 9 inches deep, with a clay subsoil ; class 2.—*J. A. Maddock*, 1883.

The south is rolling prairie, light sandy land ; class 3. Land along here is very dry, no water being noticed.—*E. Bray*, 1881.

Sub-division.—Is an undulating prairie, with slope to the west. The soil is class 1, being a black loam with clay subsoil. There are three good sized lakes in the township, all containing good water ; the sloughs also contain good water. There is a rich, deep black loam in the proximity of the lakes and marshes, and a luxuriant growth of grass. There is no timber. The township is a good one, and for the present, admirably adapted for grazing.—*J. P. B. Casgrain*, 1883.

- 26. Outlines.** Along the north, high rolling prairie. Soil, a clay loam, class 1. Water abundant in ponds and marshes.—*J. P. B. Casgrain*, 1883.

Generally is rolling prairie in the southern half, and heavily rolling and broken to the north. The soil is a fair sandy loam with clay subsoil, with the exception of the northern portion which is chiefly gravel. Along the west and east lines it is rolling prairie. Soil, sandy loam about 9 inches deep, class 2. Water is rather scarce in the west ; but a few sloughs occur in the east.—*J. A. Maddock*, 1883.

Sub-division.—Is a high rolling prairie dotted with numerous marshes. The soil is a clay loam with a clay subsoil and rates class 1. There is a luxuriant growth of grass all over the township, the water in the marshes is fresh and good ; but there is no wood. This township is well adapted for farming. A cart trail diagonally crosses Sections 5, 6 and 7.—*J. P. B. Casgrain*, 1883.

Rolling prairie, except about a mile of its northern portion, which is rather broken and gravelly. Soil, a good sandy loam with a clay subsoil. Water is plentiful, except on the west and the east lines. The soil is generally class 2.—*J. A. Maddock*, 1883.

27. *Outlines*.—Southwards, high rolling prairie. Soil, clay loam, about 12 inches deep, clay subsoil, class 1. Water is plentiful in ponds and marshes.—*J. P. B. Casgrain*, 1883.

Sub-division.—Is an open slightly rolling prairie, without wood. Soil, sand and clay, and in a few places sand and gravel, and may be rated as class 2 for agricultural purposes. There is not much water distributed throughout the township; but there is a large slough on the southern boundary, which extends about three quarters of a mile into the township.—*C. C. Fitton*, 1883.

28. *Outlines*.—There is a depression in the north of this township which gives indications of an alkaline nature; the grass was short and not healthy.—*T. Kains*, 1882.

The south is open and slightly rolling, and only one slough was crossed in surveying the south line.—*C. Fitton*, 1883.

Rolling prairie to the north and broken and gravelly in the south. The soil is a good sandy loam with clay subsoil. The west is rolling, with a sandy, and in places, a black loam soil, class 2; water scarce. The east is also rolling, but the soil is more gravelly, and class 2; water is also scarce.—*J. A. Maddock*, 1883.

Sub-division.—This township consists of level, rolling and unwooded prairie. The soil is chiefly a sandy clay and a sandy gravel, which may be rated from classes 1 down to 3 for agricultural purposes. Water is scarce. A deep gully runs across the township in the northern portion.—*C. E. Fitton*, 1883.

29. *Outlines*.—Along the south boundary, undulating and level. Soil clay loam, from 2 to 5 inches deep, on a clay subsoil, class 2. The surface is dotted over with numerous grass swamps and ponds.—*T. Kains*, 1882.

Outlines and sub-division.—The north and the west boundaries are level and rolling. The soil is a clay about 18 inches deep on a clay subsoil, and class 2. Good water is in fair supply. Two creeks cross the west line in Section 18, flowing in a south-westerly direction. The east is inclined to be hilly and undulating. Two creeks cross the eastern boundary—one in Section 12 and the other in Section 24, both of which flow slowly westwards. The land is occasionally alkaline. Throughout the township the surface is generally undulating, with a clay loam soil on a clay subsoil. In places there are small areas of alkaline land, and in others there is limestone gravel. Water is generally good, but scarce. A lake lies on parts of Sections 23 and 26.—*D. C. O'Keefe*, 1882.

30. *Outlines and sub-division*.—Along the north and west boundaries, the surface is rolling, undulating and in places level. In the east and the south, the surface is higher, being hilly and undulating.

On all the boundaries, the soil is a deep clay loam, and generally class 2. In Section 4 a creek flows south and along this line, water is in fair supply, although some of it is alkaline and there is some alkaline land. On the west, water is scarce on Sections 7, 18 and 31, good water was found on Sections 12 and 36, and a fresh creek on Section 6, flowing westwards. Throughout the township the general surface appears to be undulating. Soil, clay loam on a clay subsoil, and occasionally some limestone gravel. The surface water is generally good. Sections 26, 25, 35 and 36, are broken by a salt lake around which are high hills with boulders of granite and limestone. There is no wood.—*D. C. O'Keefe, 1882.*

- 31.** *Outlines and sub-division.*—Along all the boundaries the surface is undulating and rolling prairie. Alluvial soil is clay loam, about 18 inches deep, clay subsoil, class 2. There is limestone gravel in places without any covering of soil. Water is plentiful all along the east and west lines, with the exception of Section 6, where there is a scarcity. Generally, this township is hilly and rolling. Soil, clay and clay loam, subsoil clay, limestone, gravel occasionally. There are numerous swamps. Water good, except in lake on Section 2, which is salt. Quartz and granite boulders and limestone gravel are met with on the hills.—*D. C. O'Keefe, 1882.*

- 32.** *Outlines.*—Along the east and west boundaries the surface is undulating and rolling, with a clay loam subsoil 18 inches deep in places, on a clay subsoil, class 2. Good water in places along both lines. The cart trail to the Sioux Reserve was crossed in Section 31.—*D. C. O'Keefe, 1882.*

The north is open and undulating, with a dry sandy loam, class 2. There is a small show of poplar in one or two bluffs.—*C. A. Bigger, 1882.*

Sub-division.—Undulating and hilly prairie. Soil, clay and clay loam with clay subsoil, occasionally limestone gravel. Quartz and limestone boulders are met with on the knolls. There are numerous deep ponds and marshes, with good water. A drawback to settlement is the absence of timber.—*D. C. O'Keefe, 1882.*

- 33.** *Outlines.*—The southern part is open and undulating, with a sandy loam soil, very dry and growing a few bluffs only of poplar.—*C. A. Bigger, 1882.*

The north is undulating, and is composed of clay loam on a clay subsoil and class 2. Sometimes the land is rough and gravelly.—*D. C. O'Keefe, 1882.*

Eastwards, rolling. Soil, 8 inches deep on a sand subsoil, class 2. There are a couple of marshes on this line and a cart trail.—*T. Byrne, 1882.*

The west is rolling. Soil, clay loam, 6 inches, on clay subsoil, class 1. A cart trail in Section 6, and numerous marshes everywhere.—*H. F. Bray, 1882.*

Sub-division.—Undulating prairie. Soil, clay and sandy loam. There is a salt lake in Sections 5, 6, 7, 8, 17 and 20, and a few small lakes in which the water is good. No timber. The trail to the Sioux Reserve crosses the south tier of sections.—*D. C. O'Keefe, 1882.*

- 34. Outlines.**—Along the north and south boundaries, the surface is level, undulating and rolling. Soil, clay loam, 15 to 18 inches deep on a clay subsoil, class 2. A few places are gravelly. Water generally is good, but is scarce in the south, while some alkaline land occurs in the north.—*D. C. O'Keefe*, 1882.

The west is rolling prairie, and has a sandy or clay loam soil on a clay subsoil, class 1. Water is plentiful.—*H. F. Bray*, 1882.

The east is rolling prairie, soil, 8 inches deep on a clay or sand subsoil, class 2. Water plentiful in lakes and ponds.—*T. Byrne*, 1882.

Sub-division.—Undulating prairie. Soil, clay and sandy loam, with clay and sand subsoil. Occasionally small areas of alkaline land, broken by several lakes of brackish water. Some good meadow land. No timber. A lake with marshy shores extends, east and west, over Sections 27, 28 and 29.—*D. C. O'Keefe*, 1882.

- 35. Outlines.**—The east is rolling. Soil, 18 to 20 inches deep, clay sub-soil ; class 2. In Section 25 there is a large alkaline swamp. The line crosses several ponds and a good sized lake in Section 36.—*T. Byrne*, 1882.

Northwards, the surface is gently rolling ; soil, sandy loam on clay subsoil. Sloughs are numerous.—*H. W. Selby*, 1883.

West, level prairie. Soil, clay and sandy loam, from 3 to 6 inches deep, on a sand or clay subsoil ; class 1. In the south half of Section 19 and north of 18, are dense poplar woods, with willow underbrush ; the soil here is very sandy. Water is plentiful in marshes.—*H. F. Bray*, 1882.

South ; level, undulating and rolling prairie. Soil, clay loam, 15 to 18 inches deep, clay subsoil ; class 2 ; in places, limestone gravel, and in others, alkaline land was found. Water good.—*D. C. O'Keefe*, 1882.

Sub-division.—The south-easterly portion of this township is a high rolling prairie, with numerous sloughs and ponds. Soil, clay and sandy loam on a sandy subsoil. The remainder of the township is a gently rolling prairie, with a sandy loam soil on a clay subsoil. The land on the south side of Lake Number Two, is full of alkali, making it difficult to approach the water. This lake is probably 1,000 acres in area. The soil throughout the township is generally class 2, and in some places class 1.—*H. W. Selby*, 1883.

- 36. Outlines.**—South, rolling prairie ; soil, 18 inches deep on a clay subsoil ; class 2.—*T. Byrne*, 1882.

The west is rolling and dotted with poplar and willow. Soil 2 to 8 inches deep on clay and gravel ; classes 2 and 3. Numerous marshes. The Carlton trail crosses in Section 7.—*H. F. Bray*, 1882.

Along the north, the soil is a heavy black loam. Water good and fresh. Bush at the north-west corner to a limited extent and small in size. *W. A. Ashe*, 1882

Sub-division—The south-easterly and north-westerly parts of this township are high hilly prairie, with numerous sloughs and

small lakes. In the north-westerly part there is a quantity of poplar scrub. Soil, sandy loam, with sandy and gravelly sub-soil. The central part is a rolling prairie; soil, sandy loam on clay and sandy subsoil. Soil throughout averages class 2. Lake Patience is situate in a depression with rising banks every way, except towards Township 37, Range 3, where it overflows. This lake probably covers 1,500 acres and partly submerges Sections 16, 21, 22, 23, 26, 27 and 35.—*H. W. Selby*, 1883.

- 37. Outlines.**—Along the southern sections, the soil is a heavy black loam. The surface water is fresh, and there is a small quantity of wood.—*W. A. Ashe*, 1882.

The north is rolling and hilly, with a sandy loam soil. A number of ponds and sloughs and a trail were crossed on this line.—*H. W. Selby*, 1883.

The east is level with a soil varying from 5 to 15 inches on a sandy loam subsoil, classes 1 and 2. In the north half of Section 13, and all of 24 and 25, is a large brackish lake, bordered with willow and brush. There is a fresh lake in Section 36.—*S. M. Starkey*, 1882.

The west is level and rolling with numerous sloughs, bordered with willow and poplar. Soil, a black loam 5 to 18 inches deep on clay, classes 1 and 2.—*A. G. Cavana*, 1883.

Sub-division.—To the east is a rolling prairie with large alkaline lakes and hay marshes, with a soil of sandy loam on a clay and sandy subsoil. To the west it is hilly with numerous ponds and sloughs, and scattering clumps of poplar and willow. Soil, sandy loam on sand and gravel subsoil, mostly class 2, some class 3, and a little of class 1 in Sections 9, 10, 15 and 16. Sections 4, 5, 6, 7 and 8 have some surface boulders.—*H. W. Selby*, 1883.

- 38. Outlines.**—The south is rolling and hilly, with a sandy loam soil on a clay subsoil. There are a number of grass ponds and sloughs along the line, and in Section 3 there is a trail.—*H. W. Selby*, 1883.

The west is open and rolling. Section 36 is almost level and very stony. The soil is a black loam on a clay subsoil, and is about 6 inches deep, and class 2. There are many sloughs and ponds.—*A. G. Cavana*, 1882.

The east sections are level with a deep loamy soil, and generally class 1. Only two marshes are on this line. The Edmonton trail crosses Section 36.—*S. M. Starkey*, 1882.

Sub-division.—This township is composed of a gently rolling prairie, the northern portion of which is very suitable for farming. Soil, clay loam, 12 inches deep, on a clay loam subsoil. The southern portion is higher and more rolling, with numerous sloughs and ponds. Soil, sandy loam on clay, and sandy subsoil. Granite boulders and some limestone appear on Sections 19, 30 and 31. Lake on Section 12 is an enlargement of a water-course from Township 38, Range 2. The telegraph line to Edmonton crosses 31, 32, 33 and 34.—*H. W. Selby*, 1883.

- 39. Outlines.**—Westwards, gently rolling prairie, with stony ridges in Section 6. The alluvial soil is sandy loam, from 2 to 12 inches

deep, with sandy subsoil; class 2. Several marshes were crossed, and in Section 7 the South Saskatchewan River. The river here is about 40 chains wide, with banks from 50 to 75 feet high.—*F. L. Blake*, 1883.

Sub-division.—The South Saskatchewan River enters on Section 7 and leaves at 34, with a current of about 3 miles an hour; its banks are from 30 to 100 feet high. West of the river is a rolling prairie, with a sandy loam soil of from 2 to 8 inches, on a sandy subsoil, mostly class 2. Stony ridges of granite boulders and limestone extend along the right bank of the river to river lot 28, from one to two miles inland. East of the river is a gently rolling prairie with a few sloughs, and a soil of clay and sandy loam on clay and sandy subsoil, mostly class 1. The telegraph line crosses Sections 1, 2 and 3.—*H. W. Selby*, 1883.

40. *Outlines.*—Along the south and the west, the surface is gently rolling, with sandy loam soil. In Section 1, the Edmonton trail crosses the line, and Sections 3 and 4 are much broken by the Saskatchewan River. Water is scarce on the east line.—*H. W. Selby*, 1883.

The northern portion is very flat, with many ponds, and a sandy soil. Two trails cross the line—*G. B. Abrey*, 1882.

The eastern sections are level, with patches of poplar and willow. The soil is about 18 inches deep and class 1. The Edmonton trail crosses in Sections 1 and 12, and the Saskatchewan River in Section 36. There are birch, poplar and willow trees along the banks of the river.—*S. M. Starkey*, 1883.

Sub-division.—The South Saskatchewan River enters at Section 4 and leaves at 36; current, 3 miles; banks 50 to 100 feet high. East of the river is a gently rolling prairie with a gradual descent to the river bank; numerous ravines extend out from the river, generally wooded. Soil, sandy and clay loam, on clay and sandy subsoil. West of the river, is a rolling prairie, with some large hay marshes and a sandy loam soil on a clay and sandy subsoil. Throughout the township the soil mostly rates class 2.—*H. W. Selby*, 1883.

41. *Outlines.*—The surface along the north, east and the west boundaries is undulating. The alluvial soil has a depth of from 4 to 10 inches on clay loam and gravel subsoil, and is usually class 1. The water is both alkaline and fresh, and less is to be found along the west boundary than any of the other lines.—*C. Carroll*, 1882.

The southern sections appear to be generally level, with numbers of ponds and marshes and a light sandy soil.—*G. B. Abrey*, 1882.

Sub-division.—The land is generally high and rolling and the soil tolerably good, except along the west boundary, where it is gravelly. There are eleven lakes in the township, all of which lie in the south-east half and all alkaline. Wood is scarce.—*C. Carroll*, 1882.

The northern sections are rolling prairie, with a few scattered bluffs. Soil is class 1, large hay marshes occur here and there.—*J. L. Reid*, 1879.

- 42. Outlines.**—The southern portion is undulating prairie. Alluvial soil, about 10 inches deep, with loam subsoil; class 1. Water is plentiful. In Section 1 a muskeg about 400 yards wide was crossed.—*C. Carroll*, 1882.

Sub-division.—The western half of this township is level prairie with a few sloughs and clumps of poplar and willow. Soil, sandy loam 10 inches deep, on sandy and clay subsoil, particularly suitable for agriculture. The eastern half of the township is much broken by alkaline lakes, and the soil, though good, is more or less mixed with alkali, which makes it unsuitable for grain, but in the latter part of the summer, after the water has somewhat subsided, the growth of grass is most luxuriant. As fresh water sloughs are met with among these lakes, this portion is excellent for stock.—*H. W. Selby*, 1883.

- 43A. Sub-division.**—This township is of a gently rolling character, with a good rich soil of deep sandy and clay loam, on a clay subsoil, mostly class 1. There are some scattering clumps of poplar and willow and numerous fresh water grass swamps. Taken altogether, it is well adapted for agricultural purposes, both for grain and stock raising. This township is fractional and comprises only 18 sections.—*H. W. Selby*, 1883.

- 43. Sub-division**—The north half of this township, with the exception of Sections 24 and 25, forms a portion of an Indian Reserve. The surface is gently rolling prairie, composed of a sandy loam soil and generally class 1. There is some poplar, scrub, and some scattered bushes, but much of the timber has been cut off. There are a few hay marshes and lakes scattered about. Duck Lake and another small one south of it encroach on Sections 24 and 25.—*J. L. Reid*, 1879.

- 44. Outlines.**—The surface of the country along the north is rolling and the soil light. Several grass muskegs were crossed. The surface is dotted with poplar and willow. A large lake extends over the northern portion of Section 36, and in 32 a trail crosses the line.—*W. F. King*, 1878.

Sub-division.—The southern boundary lies in Beardy's Indian Reserve. The north-westerly block of sections to the number of 16 only properly belong to this township, and are generally rolling prairie with numerous poplar and willow bluffs. The soil generally is class 2, but much of it is class 1. In Section 18 there is a large swamp. There are many French half-breeds settled in this township, at the time of survey (1879). The Duck Lake and Carlton Road crosses from Sections 22 to 30 —*J. L. Reid*, 1879.

- 45. Outlines.**—Section 1 is greatly submerged by a lake, some poplar and willow grow on the west shore. Section 2 is covered with muskegs, willow and poplar swamps, and second growth poplar. Section 3 is open and rolling, the soil light, Nos. 4, 5 and 6 are similar, and dotted with small willow bluffs.—*W. F. King*, 1879.

Sub-division.—This is a fractional township. Soil, light sandy nature, except Sections 19, 20, 30, 31 and 32, which are a sandy loam on a clay subsoil and well adapted for

agricultural purposes, with plenty of fuel on each section. There is some spruce and tamarac growing along the lakes, which will make good building timber, but the best has been culled out and drawn to the Saskatchewan, which touches the north-west corner of the township. About one-fifth of the township is covered with two lakes.—*L. Patrick*, 1882.

- 46. Outlines.**—The west is hilly and fairly timbered. In Sections 7 and 30 there are creeks flowing eastwards to the river. The south is well wooded and watered, and in the east there are a few sloughs and a great deal of scrub with some fair sized timber.—*L. Patrick*, 1882.

Sub-division.—The North Saskatchewan enters at Section 6 and leaves at 32. West of the river the surface is uneven, full of ravines 60 to 100 feet deep, has a light sandy soil and is covered with small poplar, hazel and willow brush. East of the river, Sections 6, 7, 9, 16, 20 and 21, are a rich clay loam, but badly broken by ravines. The rest of the township will scarcely rate class 2. There is considerable building spruce throughout the various swamps, but it has been already culled. There are several fresh water creeks and a large lake on Sections 1, 2 and 3.—*L. Patrick*, 1882.

- 47. Outlines.**—The land in the central portion of the township falls to the Saskatchewan River. Spruce, pine, tamarac and poplar are found in the river valley.—*W. F. King*, 1878.

Sub-division.—The North Saskatchewan River enters the township by Section 5, and leaves it by Section 25. To the north-west of the river, the land is class 3 and rather poor for cultivation. It is covered with poplar and a few small pine; it is very wet and low, and contains a large number of marshes. There are several small lakes and a very large one, which, at high water, submerges much of the south-west of the township. To the south-east of the river, the land is not much better and is more hilly, except along the Carlton and Prince Albert Trail, where there is some better land which is level. This trail crosses Sections 1, 12, 13 and 24. The east line is well timbered and so is the west of the north line. Between Sections 2 and 3 there is a belt of tamarac suitable for building.—*L. Patrick*, 1883.

- 48. Outlines.**—The surface is rolling, with numerous lakes, sloughs and marshes. The soil is generally a sandy loam on a subsoil of clay or sandy loam, and classes 2 and 3. The growing timber is either poplar or willow, and there is also some fair sized spruce and tamarac, together with cherry scrub. Much of it is good for rails and firewood. Spruce grows on Sections 32 to 36. In Section 32, a creek flowing between marshy banks, crosses the line.—*A. G. Cavana*, 1882.

Sub-division.—This township has numerous lakes and swamps, and has a poor soil except some of the north-west sections, which may be rated class 2. There is plenty of wood, chiefly pine, poplar and willow, suitable for fuel and fencing. The northerly part has a rolling surface, and the southerly part is very hilly.—*L. Patrick*, 1882.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE IV.

7. *Outlines*.—The northern portion is very heavily-rolling prairie, with a few stones and fine gravel on the ridges. The southern portion is hilly, with stones and gravel on the hills. Soil, chiefly a sandy loam, with a clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
8. *Outlines*.—Very heavily-rolling prairie, with a few stones on the ridges. Soil, sandy loam with clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
9. *Outlines*.—Hilly and uneven; gravel, stones and boulders on all the hills. These hills vary from 20 to 60 feet high. A few sloughs may be found. Soil, sandy loam with subsoil of white or brown clay. Classes 2 and 3.—*A. O. Wheeler*, 1883.
- The south boundary passes along the south-western slope of an alkaline drainage basin, consisting of a succession of alkaline marshes lying in a boggy flat about a mile in width, and connected by a marshy creek crossed in Section 2, running towards a large lake lying about 15 miles south-east. A good quantity of hay could be procured along the creek.—*T. Fawcett*, 1882.
10. *Outlines*.—Rolling prairie. The south branch of Old Wives' Creek flows through the north-west corner. The water in the creek and ponds is strongly alkaline. Soil, sandy loam, with clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
11. *Outlines*.—The surface is generally rolling, with a sandy loam soil on a clay subsoil, and Class 2.—*A. O. Wheeler*, 1883.
- Along the west, the surface is undulating, with a hard clay soil. Old Wives' Creek crosses the township in a northerly and southerly direction. Its course is very winding and the surface of the vicinity is much broken in consequence. Some maple wood grows along its banks.—*A. F. Cotton*, 1883.
12. *Outlines*.—Along the west, it is undulating prairie. The soil varies from a light sand to a clay loam, with little or no grass.—*A. F. Cotton*, 1883.
- Along the north the country is somewhat hilly and broken by ridges; the soil varies from sandy to clay loam on a clay subsoil. Water generally is alkaline. Old Wives' Creek is crossed seven times by this line. Considerable timber, green and dead, chiefly ash and maple, 2 to 12 inches in diameter, grows along the creek.—*W. T. Thompson*, 1882.
- Rolling prairie: the junction of the north and south branches of Old Wives' Creek takes place in this township. Bluffs of small timber were observed scattered along the edge of the creek. Soil, sandy loam, with clay subsoil. Class 2.—*A. O. Wheeler*, 1883.

- 13. Outlines.**—The western portion of the country is somewhat hilly and broken by ridges. Soil, sandy to clay loam, on a clay subsoil in most instances. The water is generally alkaline. The surface along the south is of a similar nature. Old Wives' Creek enters the township by Section 4, passes to the north of and around this section and again returns to the south line along which it meanders eastwards. Its banks are bordered with maple.—*W. T. Thompson*, 1882.

East and north boundaries. Old Wives' Creek, on which there is some wood, runs through the south-east corner. The remainder is high and very undulating. The soil is a shallow, sandy loam, on a clay subsoil.—*J. J. McArthur*, 1882.

Sub-division.—Is very broken and all sandy soil—some of it is good, but mostly it is very dry and poor for cultivating. The tops of the hills are rocky and the soil is only second and third class. Old Wives' Creek meanders along the southern limit, and is thickly bordered with ash and maple of all sizes up to 12 inches, and good for fuel. The creek and the lakes in the township are somewhat alkaline, but some of it is drinkable. Sections 8 and 9 are broken by a lake of about 200 acres, and the N.W. quarter of Section 11 is entirely submerged.—*L. M. de Chesne*, 1883.

- 14. Outlines.**—North, east and south. The south part of this township is traversed by a range of sand hills. The remainder is high and broken by many marshes. The soil is of a fair quality.—*J. J. McArthur*, 1882.

The west is somewhat hilly and broken by ridges; soil sandy to clay loam; clay subsoil. Water in marshes mostly alkaline; some small ponds in 30 and 31.—*W. T. Thompson*, 1882.

Sub-division.—Is all a hilly and broken prairie of sandy soil, third class in quality. There are a few swamps—more properly dried ponds—in which the water is alkaline. No wood is to be found, and the township is unfit for agricultural purposes.—*L. M. de Chesne*, 1883.

- 15. Outlines.**—Nearly all the south-west half of the township, except Sections 4, 5, 6 and 7, is submerged in one of the Old Wives' Lakes, the waters of which are alkaline. The land in the north-east part is high and very undulating, and in the vicinity of the lake, sandy. The soil throughout is of a poor quality.—*J. J. McArthur*, 1882.

Along the west there is a gradual descent to Old Wives' Lake, which is reached at the north of Section 7. The soil adjoining the lake is pure sand. Farther from the lake it is a poor sandy loam, which, however, gives fair pasturage.—*T. Fawcett*, 1882.

Sub-division.—Is undulating and all sandy. The lake shores are soft and impassable, where salt deposits are frequently met with. Old Wives' Lake crosses this township in a north-westerly direction. The water is alkaline. The soil is very sandy and class 3.—*L. M. de Chesne*, 1883.

- 16. Outlines.**—South and east, this township is high and very broken, with many small lakes and marshes. The land is not suited for agricultural purposes.—*J. J. McArthur*, 1882.

North and West.—Old Wives' Lake lies immediately west of the west boundary of this township, and the whole of the township gradually descends from the east to the shores of the lake. The surface of the township is generally hilly and sandy, but has a fair growth of grass; near the lake the soil is pure sand. A small salt lake submerges the half of Section 31.—*T. Fawcett*, 1882.

Sub-division.—Is high and very broken, and all sandy and 3rd class. There are a number of lakes in the township, the water of which is usually alkaline. Old Wives Lake also touches this township in the south-west corner of Section 6.—*L. M. de Chesne*, 1883.

- 17. Outlines.**—Is hilly and broken. Soil, sandy loam, and somewhat gravelly on knolls; rated second and third class. Good grazing land, as there is a good growth of grass, but too hilly and gravelly to cultivate; sloughs and ponds are numerous and contain very good water.—*J. Dudderidge*, 1882.

Surveyed along the south and west, and find that it is ridgy and rough, with a poor sandy loam soil and small boggy ponds south and larger ones westwards. The western line being near to the lake has a much poorer soil than farther east, where the grass affords a fair pasturage.—*T. Fawcett*, 1882.

Sub-division.—This township is situate in the "Coteau du Missouri" and is broken and hilly, class 3, soil, light sandy loam, with gravelly ridges. Numerous marshes of fresh water and ponds of alkaline water. Pasturage is very good; but there is no shelter, as there is no wood in the township. The Canadian Pacific Railway traverses this township, and has the station of Secreton located here.—*G. C. Rainboth*, 1883.

- 18. Outlines.**—This township is hilly and broken. Soil sandy loam, and gravelly on the ridges; second and third class. Good grazing land, as there is a rich growth of grass, but too hilly and gravelly to cultivate. Sloughs and ponds are numerous and contain very good water.—*J. Dudderidge*, 1882.

Surveyed the west line and find that the surface from the north to the south descends to the lake in the next township, that it is broken and hilly, with many ponds and marshes and that the soil in the south-west is more sandy and poorer than in the north-west. The grass, however, will afford very fair pasturage.—*T. Fawcett*, 1882.

Sub-division.—Is a rough and rolling prairie, situate in the "Coteau du Missouri." The soil is classes 2 and 3, and is a sandy loam, with sandy and marly clay subsoils. Numerous ponds, sloughs and marshes exist and generally contain fresh water. There is good pasturage in the neighborhood of the ponds and marshes. There is no timber of any kind in the township.—*G. C. Rainboth*, 1883.

- 19. Outlines.**—Is hilly and broken on the south two-thirds and rolling prairie on the north third. A small creek, called Thunder Creek, with slow current, runs eastward in a valley about twenty chains in width, through this township, emptying into Pelican Lake. An alkaline lake in the north-west corner of the township is the head of this creek.—*J. Dudderidge*, 1882.

A sluggish stream flowing east is crossed in Section 31. In southerly half of same section we rise on the Coteau, and thence along the west southwards the country is hilly. The soil, however, is good and pasture excellent.—*E. Bray*, 1882.

Sub-division.—Is a high rolling prairie which rises towards the south. The northern part is broken by the valley of Thunder Creek, in which lies a large lake with flat and marshy extremities and water slightly alkaline; soil, sandy loam—2nd class—dotted over with good fresh water sloughs, and is suitable for grazing, but would also do for agricultural purposes.—*E. J. Rainboth*, 1883.

- 20. Outlines.**—This township is rolling prairie. The land is good and suitable for farming; soil, clay and sandy loam, with clay bottom. Plenty of good surface water.—*J. Dudderidge*, 1882.

The north is fine rolling prairie, with an excellent soil of clay or sandy loam, and good water in ponds and marshes.—*E. Bray*, 1882.

Going south along west boundary for first five miles the country is rolling prairie; excellent soil of clay or sandy loam with good water; then a rough country is reached in Sections 7 and 6.—*E. Bray*, 1882.

Sub-division.—Is a rolling prairie with numerous sloughs or grassy marshes with fresh water. The south-west corner is broken by a lake on Thunder Creek about three miles long, with slightly alkaline water. The soil varies from a sandy to a clay loam and rates second class.—*E. J. Rainboth*, 1883.

- 21. Outlines.**—Southwards and westwards the surface is fine rolling prairie, with an excellent soil of clay or sandy loam. There is good water in ponds and marshes.—*E. Bray*, 1882.

Along the east the country is level, excepting Section 36, which is knolly. The soil is class 1, on a sandy subsoil. A few places are gravelly. A large marsh occurs on the east of Section 25. The north possesses much the same description of country.—*E. J. Rainboth*, 1883.

Sub-division.—Undulating and level prairie; soil class 2, is composed of sandy loam with sandy subsoil, and may be rated good grazing land, but not well suited for agricultural purposes. There are numerous marshes towards the interior.—*F. E. Brunelle*, 1883.

- 22. Outlines.**—Along the north and south lines the surface is level and the soil is generally class 2. Water is plentiful in marshes along the north, but scarce along the south. Section 2 is rather stony. The eastern sections are rolling prairie, except Section 36, which is undulating. The soil is a sandy loam and class 2. In the west the soil is much richer and classes 1 and 2, with plenty

of water; streams cross the eastern boundary in Sections 12, 24 and 25.—*E. J. Rainboth*, 1882.

On the western boundary there are creeks on Sections 6 and 30, with several marshes on 18, 19 and 31. The soil is very good.—*E. Bray*, 1881.

Sub-division.—Is rolling, and level in some parts, composed of a sandy loam over a sandy subsoil, and ranks class 2. There is good grazing in the low lands; generally water is scarce and there is no wood. The soil is not suitable for wheat.—*F. E. Brunelle*, 1883.

- 23.** *Outlines*—Westwards it is rolling and open prairie. Sections 31, 30 and 19 are class 2. A few marshes in Section 19. Sections 18, 7 and 6 are ranked 2nd and 3rd class, Nos. 7 and 6 being stony. In 7 the dry bed of a creek was crossed.—*Edgar Bray*, 1881.

In the south it is level prairie; sandy loam subsoil; class 2. Water is plentiful in the south-east.

Sections 36 and 35 are drifting sand hills, and worthless, excepting for small poplar, 3 to 4 inches in diameter; 34 is sandy and level, with a creek 30 links broad and large marsh; 33, 32 and 31 are sandy, with drifting sand in 33, and willow brush in 33 and 32. Sections 25 and 24 are broken by a valley 200 feet deep, and sandy, class 3. Sections 13, 12 and 1 are level prairie, sandy loam and class 2.—*E. J. Rainboth*, 1882.

Sub-division.—A gently rolling prairie, broken in the north-east corner by the valley of the Qu'Appelle River, in which locality the soil is class 3; but in the rest of the township, class 2, being a sandy loam on a clay subsoil. The banks of the valley are about 70 feet high and sandy; there is a lake in the valley, which is the source of the Qu'Appelle, and a creek flowing north-west, as also two creeks into the valley, all of which contain fresh water. In the north-west there is a growth of willow and some patches of poplar of from 3 to 6 inches in diameter. The township is not very suitable for agriculture. The Temperance Colony trail crosses the township.—*J. P. B. Casgrain*, 1883.

- 24.** *Outlines*.—Section 31 is open prairie, 2nd and 3rd class; Section 30 is 3rd class, being sandy or stony; a large swamp is crossed in the north half of 19; most of this section is sand hills, covered with poplar, cherry or other brush. Sections 18 and 7 are rolling prairie, some sand, classes 2 and 3. Sand hills are found in the south half of 7. Section 6 is rolling prairie, class 2. The north is rolling prairie. Good soil, being mixture of sand and clay. Sections 36, 35 and 34 are 2nd and 3rd class; 33, 32 and 31 are 2nd class, and are dotted with several swamps.—*Edgar Bray*, 1883.

The south is very sandy, and in the south-east worthless, except for some small poplar, good for fuel; eastwards it is broken, but westwards it is better and more level.—*E. J. Rainboth*, 1882.

Sub-division.—Is mostly all hilly and broken, except a tract of prairie to the north. The soil is sandy and generally classes

3 and 4 A creek, the banks of which are about 70 feet high, and the water of which, though slightly alkaline, is drinkable flows north-west from the south-west corner towards the South Saskatchewan. The township is mostly covered with poplar bush, from 3 to 10 inches in diameter, suitable for building and fuel, and thick scrub. There are some shifting sandhills of about 70 feet high, and generally water is good, but the township is not suitable for agriculture.—*J. P. B. Casgrain*, 1883.

- 25. Outlines.**—The southern part is rolling prairie. Good soil of sand and clay. Sections 1, 2 and 3 are 2nd and 3rd class, and 4, 5 and 6 are 2nd class. The west is good rolling land. Open prairie; class 2; but water very scarce.—*E. Bray*, 1881.

Section 1 is level, with a rich sandy loam; class 1. Sections 12, 13, 24, 25 and 36 are rolling, with a sandy loam soil; class 2 in 12 to class 3 in 36. Water scarce.—*J. A. Maddock*, 1883.

Sub-division—Is rolling (north half) and undulating (south half) prairie, with a light sandy loam over sand subsoil, and class 2. The water in the sloughs is fresh and drinkable, and the township is fairly adapted for farming. No wood.—*J. P. B. Casgrain*, 1883.

- 26. Outlines.**—This township is generally rolling prairie. The soil in the south is good clay loam, and in the north a good black loam, with a sandy subsoil. Class 2. Water is scarce and there is no wood.—*J. A. Maddock*, 1882.

Along the western boundary there is good rolling prairie. The soil is class 2, and the south is dryer than the north.—*E. Bray*, 1881.

Sub-division.—Has very similar surface features to Township 25 of this range. Water is more abundant and also fresh, and has luxuriant grass to the north. There is no wood. This township is well suited for farming.—*J. P. B. Casgrain*, 1883.

- 27. Along the west, rolling prairie.** The soil is sandy loam, about 6 inches deep, with a clay subsoil. Class 2. The Battleford trail crosses the line in Section 7. Water is rather scarce. Eastwards the soil is sandy and black loam, about 6 inches deep.—*J. A. Maddock*, 1883.

Southwards it is rolling prairie. Soil, sandy loam, from 10 to 12 inches deep, with a clay subsoil. Class 2.—*J. P. B. Casgrain*, 1883.

Sub-division.—Is a high, open, rolling and treeless prairie. The soil is principally sand, and here and there sand and clay. Water is very scarce, and the township is only second class for agricultural purposes. The Moose Jaw cart trail traverses this township. The north is very dry, as only one marsh was crossed in the six miles.—*C. E. Fitton*, 1883.

- 28. Outlines.**—The northern part possesses a more healthy aspect than in Range 3. The surface is high rolling prairie, somewhat knolly in places, with a few grass swamps, generally of small area, containing good fresh water. Soil is generally first class, being a good clay loam, with clay for subsoil.—*T. Kains*, 1882.

Westwards the surface is somewhat broken, over a heavy rolling prairie. Soil, a sandy loam 6 inches deep, on a clay subsoil; class 2, but very scarce of water. The eastern part is rolling prairie. Soil, a sandy loam about 6 inches deep, with clay subsoil; class 2.—*J. A. Maddock*, 1883.

Sub-division.—Open and level, without wood. Soil, chiefly clay with a mixture of sand, and sand and gravel, rating classes 1 and 2—according to locality—for agricultural purposes. Water is scarce. There is a gully running nearly across the township, in the northern portion.—*C. E. Fitton*, 1883.

- 29.** *Outlines*.—Southwards it is high rolling prairie, somewhat knolly in places, with a few small grass swamps containing fresh water. The soil is generally first class, being a good clay loam with clay for subsoil.—*T. Kains*, 1882.

Outlines and Sub-division.—Generally undulating prairie. Clay soil and occasionally small areas of alkaline land. There are numerous large marshes and excellent hay land in the north-western part of the township. Good water; no timber. East and west the soil is clay loam—sometimes 18 inches deep—with clay subsoil; class 1 and 2. The water in Sections 34 and 35 is good; in the other northern sections it is scarce. Trail to Carlton crosses the line in Section 36; and in Section 35 a creek of good water, 1 foot deep, 35 links wide, flows slowly towards the north-west. On the west line water is scarce. Along the east boundary good water is in fair supply. Two creeks, each about two chains wide, cross the line in Section 13.—*D. C. O'Keefe*, 1882.

- 30.** *Outlines and Sub-division*.—The surface is generally undulating prairie, with a clay loam soil on a clay subsoil; classes 1 and 2. Occasionally there is some limestone gravel. The north-west corner is broken by a depression or valley through which runs a creek of good water, and which supports a growth of maple, cherry and scrub; much of this wood is small and dead. The southern sections have a clay loam soil, about 15 inches deep, on a clay subsoil, and classes 1 and 2. In Sections 1, 4, 5 and 6 water is very scarce, while there is some good water in Sections 2 and 3. The trail going to Carlton crosses the westerly tier of sections, which are generally dry, except the north-west Section 31. On the east, there is water to be had in Sections 1, 24 and 25, while in Sections 12, 13 and 36 it is scarce. Some wood is to be found in the sections towards the north-west corner, but not elsewhere.—*D. C. O'Keefe*, 1882.

- 31.** *Outlines and Sub-division*.—The east, north and south boundaries are undulating prairie soil; a clay loam, sometimes 18 inches deep, on a clay subsoil; class 2. Limestone gravel occurs in places along the east. On the south boundary there is maple and cherry bush in places. The trail to Carlton crosses the line in Section 6 and follows the westerly tier of sections. On the north boundary the soil is clay and sandy loam, with a clay and sand subsoil; class 2. There are also gravelly ridges and quantities of quartz and limestone boulders in places. Good water can be found

almost anywhere. A creek of good water, 1 foot deep and 2 chains wide flows north through Section 31. On the west boundary the soil is a black clay loam, 3 to 8 inches deep, on a clay subsoil; class 2. Water is good. The trail from the Sioux Reserve to the Touchwood Hills crosses the line in Section 13. Throughout, the township is undulating prairie with a clay loam soil. Sections 32, 33, 29 and 28 are broken by a lake of good water. There is altogether very little water in the township. Limestone, gravel and boulders are found along the east shore of the lake.—*D. C. O'Keefe*, 1882.

- 32. Outlines.**—The first four north-eastern sections are open, undulating prairie; soil, dry, sandy loam; second class. Section 32 is nearly covered by a long, shallow lake, extending north and south and containing good fresh water. Section 31 has poplar bluffs and its soil is sandy.—*C. A. Bigger*, 1882.

Outlines and Sub-division.—The south is undulating prairie with a clay and a sandy loam soil. Class 2. There are occasional gravelly ridges and boulders. A lake lies in Sections 3 and 4, and a creek in Section 6. The trail to Carlton crosses Section 5 and continues north through the second westerly tier of sections. On the western boundary there are sand hills covered in places with scrub. The soil is generally sandy on a sand subsoil, and classes 2 and 3. There is a creek in Section 7, and this section and the one south of it are above the average, as the land, though low and wet, is a black loam with a clay subsoil, and class 2. The trail to the Sioux Reserve crosses Section 36. Hilly and undulating prairie, with clay loam soil and clay subsoil. Occasionally limestone gravel. The eastern portion is broken by a large ravine, in the bottom of which are two large lakes of brackish water. There is also a large lake of brackish water in the north-west portion. The land in the south-west is low, and liable to be flooded. Good water is scarce. No timber.—*D. C. O'Keefe*, 1882.

- 33. Outlines.**—The surface of Sections 1, 2, 3 and 4, is open undulating prairie. The soil is a dry sandy loam and class 2. Section 5 is nearly covered with a long and narrow fresh water lake, which extends north and south. Section 6 contains poplar bluffs and a sandy soil.—*C. A. Bigger*, 1882.

The Carlton trail follows across the township from the south and leaves in Section 34. The soil in the north is a sandy loam and class 2. There is a salt lake between Sections 33 and 34, which extends two miles into the northern township. The soil in the east and south-east is the best in the township, being a sandy loam. Clay loam about 6 inches deep and nearly all class 1, while the surface water is in plentiful supply. West of the trail the surface is very sandy and covered with poplar and willow scrub. Beaver Creek follows the western line in Sections 19, 30 and 31. Generally speaking, the eastern part is rolling prairie and is very good land. The soil is clay loam. The western part is composed of sand hills and is very poor. The sand hills are covered with poplar and willow scrub, with some large poplar timber. There are five large lakes in the township, three of which are salt, but

the two in the south-west corner of the township are good. These are long, each extending through several sections, and each probably covering 600 acres.—*H. F. Bray*, 1882.

- 34. Outlines and Sub-division.**—Rolling prairie interspersed with bluffs of poplar and willow. The land is generally very good, except in the western tiers of sections. The alluvial soil is about 6 inches deep, with a sandy subsoil. There are two large lakes in the township, both of which are salt, but the water in the marshes is generally very good. The land in the western tiers of sections is composed chiefly of sand hills. The remainder of the land is admirably adapted for growing grain. Poplar and willow occur only on the two western tiers of section, and in some places there are dense poplar woods. The Carlton trail continues north in this township, entering by Section 3 and leaving by 36.—*H. F. Bray*, 1882.

- 35. Outlines.**—The north-eastern sections are level and have a good clay loam soil, which is class 1. The south-eastern sections are rolling, with a soil mixed more with sand and covered in places with dense poplar woods and willow underbrush. The grades of soil run from 1 to 3. Throughout the township the average surface is rolling, interspersed with bluffs of poplar and an undergrowth of willow. The soil generally is admirably adapted for growing grain, and all the water—of which there is plenty throughout the township—is good. Two trails cross the township.—*H. F. Bray*, 1882.

- 36. Outlines.**—The soil northward is a heavy black loam; water good and fresh; bush was met with at the corner to Ranges 3 and 4, very limited in extent and small in size, but available for fencing and firewood for a short period.—*W. A. Ashe*, 1882.

Sub-division.—Nearly all prairie. The only timber is in Sections 24, 25 and 26, and is composed of poplar bluffs; it is generally small. The western portion is rather hilly, with marshes in the hollows. In the south-west it is very stony, and the soil very shallow. Soil is clay and sandy loam, about 3 inches in depth. The land is very wet, owing to the numerous marshes. There are no running streams, but the water in the marshes is good. The township is, on the whole, better adapted for grazing than for agricultural purposes, there being an abundance of rich grass about the marshes, which are shallow. The Carlton trail crosses the east line in Section 12. Soil, class 1 southward, class, 2 west and north, and classes 2 and 3 in the east.—*H. F. Bray* 1882.

- 37. Outlines.**—The soil along the southern sections is a heavy black loam. Sections 1, 2 and 3 are plentifully supplied with water in marshes and sloughs, and Sections 4, 5 and 6 have a sufficient supply. Section 1 is very wet, and both it and Section 2 consist of hilly prairie, gravelly on the ridges. There is considerable poplar on Section 1.—*W. A. Ashe*, 1882.

The south-east part of this township is very hilly, with numerous sloughs, generally bordered with willows. There are

some islands of small poplar, suitable for fuel only. The balance of the township is level or slightly rolling. Soil, generally first class, being a black loam, varying from 5 to 10 inches in depth, with clay subsoil. Granite and limestone ridges occur in Sections 18, 19 and 30. The South Saskatchewan River flows across the north-west angle of the township.—*A. G. Cavana*, 1883.

Sub-division.—The south-east portion of this township is very broken and hilly, with numerous marshes and ponds; the surface is stony, gravelly and untillable. The remaining portion, to the South Saskatchewan River, is a gently rolling prairie of first-class soil, sandy loam on clay subsoil, and is good agricultural land; some large grass; fresh water lakes exist on Sections 20, 29, 33 and 35. The South Saskatchewan River flows through Section 31; the west banks of the river are about 100 feet high, and steep, and the east banks are studded with wood, good for fuel and fencing. The river is muddy and has a current of $3\frac{1}{2}$ miles an hour.—*F. L. Blake*, 1883.

- 38.** *Outlines.*—The surface is slightly undulating and thickly inlaid with granite and limestone boulders at the north-eastern part of the township, and on a belt along the Saskatchewan River. The river crosses the township diagonally in a north-easterly direction, has steep banks, varying from 40 to 100 feet in height, and flows at the rate of about $3\frac{1}{2}$ miles per hour. The water becomes beautifully clear and good after spring freshets. Poplar timber is to be found in coulees and isolated patches along the river, suitable for building purposes, rails or fuel. Shallow sloughs are numerous. Soil first class.—*A. G. Cavana*, 1882.

Sub-division.—Is a rolling prairie, with the South Saskatchewan River running through it in a north-easterly direction, from Section 5 to Section 35, having banks covered with scrub, and varying in height from 25 to 100 feet. On Section 15 and part of 9 is some poplar, good for rail timber and logs for building purposes. The river flows with a current of about $3\frac{1}{2}$ miles an hour, and freezes about the middle of November. The telegraph line crosses the river on Section 26, where a ferry is also run. The south-east has very good sandy loam soil, with a good deal of surface stone, especially in Sections 36, 25 and 24. West of the river is a very good 2nd class soil—sandy loam and clay subsoil. Deep ravines run inward from the river on Sections 27, 35, 16 and 22. There are a few settlers near the ferry.—*F. L. Blake*, 1883.

- 39.** *Sub-division.*—Rolling prairie, with various grades of soil—some parts clay and some sandy loam. There are stony parts, especially in the central sections. On Sections 14, 23 and 26 there are low, stony ridges. The north-west and the south-east are fairly supplied with water. There is a dry belt of some miles wide between, while the north-east has more marshes than other parts. The land bordering on the Saskatchewan River is of very good quality, and has a number of settlers. This river crosses the south-east corner, and in the ravines which run into it there is a small quantity of wood. The river is about 20 chains wide

and possesses similar features as described in the preceding townships. There are some settlers in the south-east, and a telegraph office is kept open on River Lot No. 2. Except in the best portions, this township is not of a very superior grade for settlement.—*F. L. Blake*, 1883.

- 40. Outlines.**—The north is level prairie, very flat, with many ponds and marshes, and with a light sandy soil.—*G. B. Abrey*.

The southern sections are gently-rolling prairie, with only a few sloughs; there is a large marshy place between Sections 5 and 6, and around this the country is somewhat scrubby. The soil is a sandy loam, 5 inches deep, on a sandy subsoil, and class 2.—*F. L. Blake*, 1883.

The west boundary is undulating prairie; soil from 8 to 10 inches deep, with sandy loam and gravel subsoil; class 1. Water is not plentiful.—*C. Carroll*, 1884.

Sub-division.—This township is composed of a gently-rolling prairie, with large hay swamps, nearly dry at certain seasons of the year. The soil of the easterly portion is a clay loam on a clay subsoil; on the westerly portion, a sandy loam on a sandy subsoil. The south-easterly part has numbers of meadows, and is well suited for grazing.—*H. W. Selby*, 1883.

- 41. Outlines.**—The east boundary is undulating prairie. The alluvial soil is from 6 to 10 inches deep, with gravel subsoil. Class 1. Water is scarce along this line.—*C. Carroll*, 1882.

The south boundary is level prairie, very flat, with many ponds and a sandy soil.—*G. B. Abrey*, 1882.

Sub-division.—Mostly all rolling prairie, covered with willow and scrub. There are numbers of small sloughs scattered about; a small lake in Section 33 and another on Section 20; but the south-west half is more permeated with water, and contains some extensive fresh water sloughs and two small alkaline lakes. The soil generally throughout the township is a sandy loam, and well adapted for agriculture.—*W. C. Eaton*, 1883.

- 42. Sub-division.**—Rolling willowy prairie, with a few poplar bluffs. It is fair agricultural land, with a sandy loam soil, and in some places is a little stony. Some of the bottom lands are alkaline, more particularly in Section 36, and around an alkaline lake in Section 4. The water in the sloughs, which are not numerous, is fresh. The only creeks in the township are in the north-west, with a general north-east course, but these dry early into pools. Poplar bluffs are scattered here and there, but there is no great supply of timber.—*W. C. Eaton*, 1883.

- 43. Outlines.**—Along the east boundary it is prairie, covered with poplar and willow scrub; class 1. Several large lakes and swamps were seen, and a few hay marshes crossed on the line —*J. L. Reid*, 1879.

Sub-division.—Is all prairie land, with a black, sandy loam soil, and very suitable for settlement. The east has a number of large sloughs, and is better supplied with water than the west, which has, however, a good many scattering small ones. All the

water is fresh. The country is covered with small poplar and willow, but of not much account for fuel. There are some dry creeks along the southern boundary, and an alkaline bottom in Section 1.—*W. C. Eaton*, 1883.

- 44. Outlines.**—Along the north boundary, going west, the first five sections are undulating prairie, with poplar bluffs and branches of willows. Soil, rich sandy loam; luxuriant growth of grasses and wild vines. On Section 31 line strikes the north Saskatchewan River, and the north-west corner lies on a long low island, lying along west bank of river, and separated from the main shore by a narrow, swift channel. The east bank is abrupt, and the west bank low. The land is excellent. Although the subsoil was sand and the season unusually dry, the heavy growth of vegetation indicated the strength of the soil. The sections adjoining the township corner between Ranges 4 and 5 are very much broken up by the Saskatchewan River, which crosses the line at this point.—*C. Bigger*, 1882.

Eastwards it is prairie, with scattered bluffs, bushes, poplar and willows. Class 1. Water can be obtained in the ponds and swamps.—*J. L. Reid*, 1879.

Sub-division.—Covered with poplar and willow; has a sandy loam soil and fresh water in sloughs. This township is generally suitable for settlement and already contains some settlers. The Battleford and Carlton trail passes through the north-western part, and the Saskatchewan River cuts off a portion of Section 31. There are two alkaline lakes, one of which is in Section 1 and the other in Section 12, and there are some large swamps in the easterly tier of sections. Most of the wood in the township is of a small kind.—*W. C. Eaton*, 1883.

- 45. Outlines.**—Sections 1 to 5 are undulating prairie, covered with poplar bluffs and willow underbrush. They are composed of a rich, black sandy loam, having a luxuriant growth of grass. The Saskatchewan River breaks upon Section 6, and has steep banks on the east and low ones on the west. The Carlton trail passes across Section 5.—*C. A. Bigger*, 1882.

The northern end of the eastern boundary has a sandy loam soil on a clay subsoil, and is well adapted for agricultural purposes, with plenty of fuel on each section.—*L. Patrick*, 1882.

The southern end of the eastern boundary is rolling prairie, with numerous poplar and willow bluffs. The soil is class 2, but much of it is class 1.—*J. L. Reid*, 1879.

Sub-division.—Well covered with willow, hazel and poplar, the latter fit for fences and fuel and some for building. The North Saskatchewan River flows diagonally across the township and is about 1,800 feet wide. Fort Carlton is situate on the east side of the river. The township is rolling, except in the vicinity of the river, and has a soil of sandy loam on sandy subsoil. Class 2, well adapted for agriculture and well watered. There is a network of trails across the township.—*F. Murphy*, 1883.

- 46 Outlines.**—The Saskatchewan River passes close to the eastern boundary, and west of the river the surface is uneven, full

of ravines, 60 to 100 feet deep, has a light sandy soil, and is covered with poplar, hazel and willow brush. There is a large lake which crosses the eastern boundary and submerges a portion of Section 36.—*L. Patrick*, 1883.

Sub-division.—Well covered with willow, hazel and poplar, the latter suitable for fuel, fencing, and in instances for building. Land rolling and consisting of a sandy loam; a good class 2. At present this township is rather wet and marshy for farming, but will answer for grazing, and may be drained. All water is fresh. The Saskatchewan River crosses near the south-eastern corner and passes close to the eastern boundary.—*J. Murphy*, 1882.

47. *Sub-division*.—All covered with thick willow, hazel, poplar and birch. Land generally rolling, with a rich sandy loam soil; class 1, suitable for farming purposes. The ponds and marshes are numerous and contain fresh water. Some of the land is low and flat.—*F. Murphy*, 1883.

48. *Outlines*.—Surface much the same as Township 48, Range 3. The soil is a clay or sand loam, fair for farming or grazing purposes; marshes not so numerous; water generally good; timber smaller, and country more open. Along the north boundary it is open and rolling prairie, covered in places with poplar and willow scrub. Several large lakes and sloughs were crossed. The alluvial soil, from 12 to 20 inches deep, with a clay and sand loam subsoil; class 1.—*A. G. Cavana*, 1882.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE V.

7. *Outlines*.—This township consists of several large valleys and their dividing ridges, through which flow creeks draining into the main creek, which flows through the north-western portion of the township. Soil, sandy loam, with subsoil of brown clay, and in the north part, gravel; classes 2 and 3.—*A. O. Wheeler*, 1883.
8. *Outlines*.—Rolling very heavily. The western portion of the township, through which the south branch of Old Wives' Creek flows, is much cut up on this account. Soil, sandy loam, with white or brown clay subsoil; class 2. The bed of the creek is composed of soft clay. The water dries up in summer, and only lies in ponds, and is slightly alkaline.—*A. O. Wheeler*, 1883.
9. *Outlines*.—On the south boundary, in Section 6, the branch of Old Wives' Creek turns to the north-east and crosses the base. It is a good stream, with a rapid current and gravelly bottom. Along the remainder of the boundary the soil is rich and herbage luxuriant.—*T. Fawcett*, 1882.

The south branch of Old Wives' Creek flows through the centre of this township. The land is hilly on the east and rolling heavily on the west side of the creek. The creek is bounded by high banks of stiff clay, at the foot of which, in several places, were numerous small pieces of talc. Several deep fresh water sloughs are scattered through the township. The soil is a sandy loam, with clay subsoil, averaging 2nd class. The portion of the township west of the creek is best suited for agricultural purposes.—*A. O. Wheeler*, 1883.
10. *Outlines*.—The south branch of Old Wives' Creek flows through the south-easterly portion of the township. Small timber and scrub bush are found along its banks. The south-west part of the township is hilly, with gravel and stones on the hill tops. The balance is gently-rolling prairie, and suitable for agricultural purposes. There are several deep sloughs scattered through the township, and a large alkaline pond near the centre. Soil, sandy loam, with clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
11. *Outlines*.—The east is undulating prairie. Old Wives' Creek runs through this township. The soil is a hard clay loam. There is a small quantity of maple along the creek. Westwards the soil is a poor clay, supporting very little grass.—*A. F. Cotton*, 1883.
12. *Outlines*.—Country northwards is somewhat hilly and broken by ridges. Soil varies from sandy to clay loam, generally on a clay subsoil. Water scarce; two creeks in Section 31, feeders to Old Wives' Creek, which passes along the northern part.—*W. T. Thompson*, 1882.

Eastwards and westwards it is undulating prairie. Old Wives' Creek crosses this township. The soil varies from a light sand to a clay loam, all very hard, and with little or no grass.—*A. F. Cotton*, 1883.

- 13. Outlines.**—The soil is third class. The surface is very broken, being formed of sand hills very close together. There are some places, however, where they are more scattered. There are many small marshes, and in most of them the water is good, though in some very alkaline.—*A. C. Talbot*, 1882.

Along the south and eastern boundaries the country is hilly prairie, and broken by ridges; soil, sand loam; water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Is not suited for agricultural purposes, being gravel and sand soil, and broken and hilly; classes 3 and 4. The west part of the township has soil more of a sandy loam, and the south part, along Old Wives' Creek, is the only good land.—*L. M. de Chesne*, 1883.

- 14. Outlines.**—The soil is third class. The surface is very broken, being formed of sand hills, close together. There are some places, however, where they are more scattered. There are many small marshes, and in most of them the water is good.—*A. C. Talbot*, 1882.

The country eastwards is somewhat hilly and broken by ridges; soil varies from sandy to a clay loam, in most cases on a clay subsoil; water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—This township is like No. 13—a poor one for settlement, with numbers of sand hills and few swamps, much gravel and stone and no wood.—*L. M. de Chesne*, 1883.

- 15. Outlines.**—The soil is third class, being in places formed of sand hills. There are some places, however, where these sand hills are more scattered, but the ground is still much broken. There are many small marshes, and in most of them the water is good, though in some very alkaline.—*A. C. Talbot*, 1882.

The surface eastwards gradually descends to Old Wives' Lake, which submerges the north-east sections. As the lake is approached the soil becomes sandy, so that when the lake is reached it is almost pure sand and gravel. The grass, however, would afford fair pasturage.—*Thomas Fawcett*, 1882.

Sub-division.—Like Nos. 13 and 14 is a poor township. Soil, sand and gravel, with alkaline water in the swamps. Old Wives' Lake covers Sections 25, 26, 35, 36 and portions of 34, 27, 23, 24 and 13.—*L. M. de Chesne*, 1883.

- 16. Outlines.**—The eastern line is hilly and sandy, with almost pure sand adjoining the Old Wives' Lake. The land is worthless for farming, but there is a fair pasturage. The north boundary lies almost wholly in the lake.—*T. Fawcett*, 1882.

The eastern half of the southern boundary is covered by Old Wives' Lake. The rest of the line and also the western boundary, is very sandy and consists in many instances of nothing but sand hills, with many marshes, some fresh and some alkaline.—*A. C. Talbot*, 1882.

Sub-division.—Is a poor township, sandy, broken and hilly, and nearly half occupied by Old Wives' Lake, the water of which is alkaline.—*L. M. de Chesne*, 1883.

- 17. Outlines.**—The southern boundary is buried in the lake. The southern end of the eastern boundary is almost pure sand and worthless. The north end of this boundary and northern boundary are broken by a number of small alkaline lakes or ponds. The soil is a poor sandy loam, which will only do for grazing.—*T. Fawcett*, 1882.

All of the western boundary, except Sections 30 and 31, is submerged in the lake. The soil is very poor, gravelly and sandy. The surface is uneven and hilly, and in the depressions are small lakes. Quite a number of springs run out of the larger hills and some of them contain good water, and in many places there is good pasturage.—*L. Bolton*, 1882.

Sub-division.—This township is largely taken up by Old Wives' Lake. It has a very poor sandy soil, which supports a scant vegetation. Besides the large lake, there are numbers of smaller ones, but they are nearly all alkaline; there are however a few fresh water springs alongside the lakes. The C. P. R. skirts the north shore of the lake, and a station named Chaplin has been located here.—*G. C. Rainboth*, 1883.

- 18. Outlines**—Very hilly, the soil in places being very gravelly and stony, and in some parts sandy; other portions are clay loam, with a clay subsoil. Water is plentiful in sloughs and lakelets. In many of the lakelets the water is alkaline. Springs of good water run out of the large hills. The vegetation in many places is high and luxuriant, and will afford a magnificent pasture for horses and cattle. No timber.—*L. Bolton*, 1882.

The surface eastwards gradually descends in the direction of Old Wives' Lake. The soil is rather sandy; but the grass would afford fair pasturage.—*T. Fawcett*, 1882.

Sub-division.—This township is better than the preceding ones. Soil, over about two-thirds of the township, is class 2; the remainder, class 3. Being situate in the "Coteau du Missouri," much of the surface is hilly and broken and high rolling-prairie. Marshes and sloughs are numerous and generally fresh, with good pasturage around them.—*G. C. Rainboth*, 1883.

- 19. Outlines.**—Generally very rough and hilly. The surface throughout is covered by innumerable small hills, grass swamps, and ponds which will render it unfit for all agricultural purposes, except grazing, there being a most luxuriant growth of grass. The soil is very changeable, a sandy loam with sandy subsoil predominating. The tops of many of the sand hills are very gravelly, with some large stones.—*H. B. Proudfoot*, 1883.

Eastwards, a sluggish stream flowing east crosses Section 36. In the southerly half of same section the surface rises to the Coteau and thence southwards the country is hilly. The soil, however, is good and pasture excellent.—*E. Bray*, 1882.

Sub-division.—Rolling-prairie with numerous fresh water sloughs. The northern part is broken by Thunder Creek Valley

which is well defined with a depth of about twenty-five feet. There are two lakes in the township, both of which are alkaline. The soil is class 2 for agriculture ; but perhaps better suited for grazing.—*G. C. Rainboth*, 1883.

- 20. Outlines.**—Rolling prairie, and not nearly so rough as Township 19. There are many small hills, grass swamps and ponds which will render it difficult for agricultural purposes ; excellent grazing, there being a most luxuriant growth of grass. The soil is a sandy loam, with sandy subsoil. The tops of many of the sand hills are very gravelly, with some large stones.—*H. B. Proudfoot*, 1883.

Along the north boundary it is undulating prairie, with long gentle slopes, and a soil of very good quality. Going south along the east boundary for a few miles the country is rolling prairie ; excellent soil of clay or sandy loam with good water, then a rough country is reached in Section 1.—*E. Bray*, 1883.

Sub-division.—Is a rolling prairie, with numerous grassy, fresh water marshes, and a soil varying from a sandy to a clay loam, and generally class 2. Is a fair farming township.—*E. J. Rainboth*, 1883.

The north and west is dry rolling prairie. Soil is heavy clay with clay subsoil ; class 2.—*T. R. Hewson*, 1882.

- 21. Outlines.**—The east is fine rolling prairie, with an excellent soil of clay or sandy loam ; good water in ponds and marshes. The south is undulating prairie, with long gentle slopes, and a soil of a very good quality.—*E. Bray*, 1882.

Sub-division.—Is inferior to the township immediately to the north. The surface is generally undulating with a sandy loam soil over a sandy subsoil, and class 2. Some portions of the township are good grazing land, but there is no wood for shelter or fuel. The south-east and the centre of the township are more abundantly supplied with water in marshes than elsewhere.—*F. E. Brunelle*, 1883.

- 22. Outlines.**—Northwards, the surface is rolling prairie. In Section 32 a large alkali bed was crossed. The soil varies from a hard clay to a clay loam and gravel, ranking from 2nd to 3rd class, with some stony patches.—*J. F. Garden*, 1882.

Fine rolling prairie, with an excellent soil of clay or sandy loam. Classes 1 and 2. Good water in ponds and marshes.—*E. Bray*, 1882.

The sections along the south and west boundaries are dry, rolling prairie. The soil is a heavy clay, with clay subsoil. Class 2. A marsh was crossed in Section 19. *T. R. Hewson*, 1882.

Sub-division.—Has a level prairie surface composed of a soil of clay loam over a clay subsoil, and is good for farming purposes, and also for grazing. There is no wood, and water is scarce.—*F. E. Brunelle*, 1883.

- 23. Outlines.**—Northwards, the surface is undulating, dry and open ; and graded from second to third class. Going south, along the west boundary, the country is open and rolling for a mile, but

high ranges, or hills, of about 700 feet in height, are crossed in the next three miles. The remaining two miles are rolling or undulating; the soil throughout being from sandy to a heavy clay loam, and class 2. Permanent water, in sloughs was found. Southwards, the surface is rolling prairie. In Section 5 there is a large alkali bed. The soil varies from a hard clay to a clay loam, with some stony and gravel places, ranking from second to third class.—*J. F. Garden*, 1882.

Eastwards, rolling and open prairie. Sections 36, 25 and 24 are class 2. A few marshes in Section 24. Sections 13, 12 and 1 are ranked 2nd and 3rd class. Nos. 12 and 1 being stony. In 12 the dry bed of a creek was crossed.—*E. Bray*, 1881.

Sub-division.—Soil, class 1, clay loam and sandy loam over clay subsoil. The country is rolling, with a rougher portion lying in the south-west corner. Water is scarce. The township is a good one for farming, although the soil is somewhat heavier than in the neighboring townships. A narrow marsh, about two miles long, lies along the north portions of Sections 29 and 30.—*J. Burke*, 1883.

- 24** *Outlines*.—North-west quarter is broken by the valley of the South Saskatchewan, on the banks of which is a small amount of timber, principally poplar and balm of Gilead. The river bed is 100 feet below the adjoining prairie, and has a width of about half a mile, fully half of which is sand-bars, which are continually shifting and changing the channel of the stream. The character of the soil changes, after crossing the river, from a good second class to third and fourth class quality, being very sandy, with vegetation extremely short and sparse.—*T. Kains*, 1882.

Westwards, the land has a poor, fourth class, sandy soil. The South Saskatchewan River, which is crossed in Section 19, is about 30 chains wide, running in a valley about $1\frac{1}{2}$ miles broad and approximately 250 feet deep, but in places only 100 feet. There are numerous shifting sand bars; current 3 miles; water in the channel from 7 to 10 feet; banks are eroded and in some places quite abrupt. Cherry and poplar are to be found at the edge of the valley, and in it, cottonwood, poplar, maple and cherry, some cottonwood, measuring 14 inches in diameter. From the river to the north boundary of Township 23 the land is open, undulating, sandy soil, and 3rd class.—*J. F. Garden*, 1882.

Section 36 is good rolling open prairie; 2nd class. Section 25 is stony; class 3. In this section a trail crosses the line. Section 34 is sandy; class 3. In this section is Aikton Creek, a small stream about 10 links wide. A trail and a marsh occur near the section corner. Poplar, willow and elm timber extend as far as the Saskatchewan River in Section 33. Section 25 is 3rd class, being sandy or stony. Section 24 is 3rd class, having a large swamp in the north half, and many sand hills, covered with poplar, cherry and other brush. Sections 13 and 12 are rolling prairie; some sand; classes 2 and 3. Sand hills in the south half of 12. Section 1 is rolling prairie; class 2. A number of marshes occur in all these sections.—*E. Bray*, 1881.

Sub-division.—The Saskatchewan River traverses the north-western part. South of the river the surface is slightly undulating; soil, sandy loam on sandy subsoil, getting lighter towards the north. North of the river is sand hills, interspersed with small bunches of willow and scrub. The river varies one-third to three-quarters of a mile wide, thickly fringed with poplar, balm of Gilead and scrub along the right bank, but almost bare on the left bank.—*J. Burke*, 1883.

- *Outlines.*—Surveyed the south boundary west of the Saskatchewan. The river has been described in Township 24. In this township it takes a bend to the west completely around Sections 5 and 6, and flows west, leaving the township in Section 7. Sections 5 and 6 are sandy, with poor vegetation.—*T. Kains*, 1882.

Surveyed to the south-east of the River Saskatchewan and north-wards along the eastern boundary. The land is generally rolling, except near the river. The Qu'Appelle River joins the larger river in Section 3, and the trail to Prince Albert also goes north through this section, which is sandy, and class 3. Sections 1 and 2 are good, and class 2. The eastern sections are generally good land, and class 2. There is no wood upon them and surface water is scarce.—*E. Bray*, 1881.

Along the western boundary the surface is generally level prairie, rising towards the north. Section 6 is very sandy, with poplar brush, and class 4. The Saskatchewan River crosses Sections 7 and 18, and possesses the features already described in Township 24. The banks here are almost 300 feet high. The remaining sections north of the river are a sandy loam, 4 to 6 inches deep, and classes 2 to 4, the dry parts being the latter.—*J. A. Maddock*, 1883.

Sub-division.—The Saskatchewan flows through, and forms what is called the "Elbow," the scenery around which is very picturesque, but the soil inferior. The Qu'Appelle River enters the Saskatchewan on Section 10, but is a very small stream, which dries very much during the summer, and near its mouth runs for some distance under ground. General soil, sandy loam over sandy subsoil, and class 1. Surface water is scarce.—*J. Burke*, 1883.

26. *Outlines.*—The northerly sections are undulating prairie; clay loam soil, about 12 inches deep; clay subsoil; class 1. A few marshes were crossed, and in Section 36 the Temperance Colony trail.—*M. J. Charbonneau*, 1883.

Good rolling land; open prairie; class 2. Several marshes were crossed, especially in the north half of the township.—*E. Bray*, 1881.

The west is rolling; soil a sandy loam, about 6 inches deep, with a clay and sand subsoil, class 1. Water scarce.—*J. A. Maddock*, 1883.

Sub-division.—Dry, rolling prairie, with a few sloughs. Soil, clay loam over clay subsoil; class 1; well adapted for farming. The Temperance Colony trail passes through this township, and is much used. The mail carriers' trail also passes the south-west corner. There is no timber.—*M. J. Charbonneau*, 1883.

- 27. Outlines.**—Eastwards, rolling prairie ; westwards, heavily-rolling and broken. Soil is sandy and black loam, about 6 inches in depth, with a clay subsoil. Classes 1 and 2. A small quantity of surface water only. The Battleford trail crosses Section 12.—*J. A. Maddock*, 1883.

Sub-division.—Rolling prairie, with a few fresh water sloughs, and a soil of a sandy loam over a clay subsoil, and rates class 1. There is no bush. The Temperance Colony trail traverses this township, which is well adapted for agricultural purposes.—*M. J. Charbonneau*, 1883.

- 28. Outlines.**—Northwards it is rolling prairie. Soil, sand loam, from 4 to 6 inches ; clay subsoil. Classes 1 and 2. The surface of the country is dotted with numerous grass swamps.—*T. Kains*, 1882.

Along the south boundary the surface is similar to Township 27 of this range.—*M. J. Charbonneau*, 1883.

Is rather broken and rough in its northern half, and rolling in its southern half. The west is heavily-rolling and the east somewhat broken prairie. Soil, sandy loam, about 6 inches deep, with a clay sub-soil. Class 2. A few ponds were crossed westwards, but along the east, water is scarce.—*J. A. Maddock*, 1883.

- 29. Outlines.**—Southwards, it is high, rolling prairie, somewhat knolly in places, with a few grass swamps, generally of small area and containing good water. Soil, generally first class, being a good clay loam with a clay subsoil.—*T. Kains*, 1882.

Outlines and Sub-division.—Surface undulating, with a clay loam soil, 18 inches deep in the east and the north. Classes 1 and 2. On the east side of the township water was scarce, although some was found on Section 1, and some between Sections 24 and 25. Along the west the soil is 8 to 18 inches deep and the surface nearly level. Generally, in the interior the surface is undulating, with a clay loam soil and very few swamps—the south-west quarter having the most—but such as there was contained good water. No timber.—*D. C. O'Keefe*, 1882.

- 30. Outlines and Sub-division.**—Except along the north, which is level prairie, the balance is undulating and rolling prairie. Soil, clay loam, 15 inches deep in places, on a subsoil of clay. Classes 1 and 2. Good water is to be found. A fresh creek crosses Section 26, flowing slowly west. In the northern part of this section there are large maple and poplar trees, with dense willow, brush and scrub. In the interior, undulating prairie, clay loam soil on a clay subsoil. Occasionally, limestone gravel. A few small hay marshes ; water good.—*D. C. O'Keefe*, 1882.

- 31. Outlines and Sub-division.**—The southerly two-thirds is level prairie. Soil, clay and sandy loam, from 4 to 18 inches deep, on a clay and sand subsoil ; class 2. A creek of good water, 40 links wide and 15 inches deep, crosses Section 24, flowing slowly west. There are also two coulees with good water in them. Water, generally, is scarce. Section 31 is class 4, being in the sand hills, which are covered with poplar and large willows. Part of Section 32 is somewhat similar. The balance is a sandy loam, on a clay

subsoil, class 2, and has green and dry poplar, willows and good water. The trail from the Sioux Indian Reserve to the Touchwood Hills crosses from this section to Section 13. Section 35 has a big swamp, with some maple and scrub at the eastern extremity; soil, 3rd and 4th class. Section 36 is level prairie, clay loam soil, clay subsoil; class 2; good water. Generally, throughout the township, level prairie. Soil, clay and sandy loam. There is a coulee of good water in the eastern part. In the north it is somewhat broken by sand hills, and there is some poplar suitable for fencing and fuel. A supply of timber could be obtained from the township to the north. Sections 32, 33 and 34 are broken by a lake of good water, along the southern shore of which is an extensive hay meadow, and also another meadow in Sections 25, 26, 35 and 36, where the land is low and rich.—*D. C. O'Keefe*, 1882.

- 32. Outlines.**—On the north boundary, the first four and a-half sections are high sand hills, poplar bluffs, no water at all and worthless. In Section 33, line enters Moose Woods; large poplar, balm of Gilead and an occasional small bunch of birch. Section 32 and Section 33 have a muskeg, with a sandy bottom. The balance of Section 31 is an excellent clay soil.—*C. A. Bigger*, 1882.

Sub-division.—This township is generally known as the Red Hills, and is composed of pure red drift sand hills, with a good deal of poplar timber, fit for fencing and fuel. What little water there is, is good. Sections 3, 4 and 5 are broken by a lake of good water, around which is an extensive hay meadow. There is also an excellent meadow on Sections 1, 2, 11 and 12. The township is not suitable for settlement, except in certain of the best parts. The trail from the Touchwood Hills to the Sioux Reserve crosses the south-west corner, after having skirted the lake on the south and west.—*D. C. O'Keefe*, 1882.

- 33. Outlines.**—Most of the southern sections are high sand hills, with poplar bluffs and no water. In Section 4 the Moose Woods contain some large timber, with some birch. Section 6 has an excellent clay soil.—*C. A. Bigger*, 1882.

Along the eastern boundary there are sand hills with poplar and willow scrub. Class 4. This boundary crosses Beaver Creek twice in Section 24, six times in 25 and once in 36. The north is scrubby sand hills. Beaver Creek crosses Section 36, with dense willow along its banks. A large marsh extends over the west half on Section 31. The western boundary lies over a very large marsh, but there is some class 1 soil in places.—*H. F. Bray*, 1882.

Sub-division.—Generally very broken and hilly, and dotted with small islands of poplar, mixed with occasional trees of birch. Beaver Creek crosses the north-east corner. The soil of the township is generally a sandy loam, and class 3. The western part of the township is occupied by a very large marsh, which lies along the eastern bank of the River Saskatchewan. Beaver Creek is in close proximity to and lies near the eastern boundary.—*C. C. Duberger*, 1884.

34. Sub-division.—This township is composed entirely of sand hills, and is unfit for either farming or grazing purposes. The hills are covered with poplar and willow scrub. There are numerous small bluffs of poplar and willow scattered throughout the township. Beaver Creek crosses it diagonally. The water is very pure. The valley of the creek, 10 or 15 chains in width, is densely wooded with poplar, some of which is 12 inches in diameter, but it would be almost impossible to get it out of the sand hills. All the water is good. There is a large marsh in Section 6, and some of the land there is good. The Carlton trail crosses the line in Section 7, and continues irregularly on the line till it leaves the north of the township.—*H. F. Bray*, 1882.

35. Sub-division.—Prairie, with scrub, and dotted with poplar and willow bluffs. The western boundary is traversed by the Saskatchewan, which is bordered by a range of hills about 70 feet in height. The valley of the river is heavily wooded with poplar. The soil is a light, sandy loam, and is not very good. The water is generally very good. Beaver Creek crosses Section 6, flowing to the Saskatchewan. The Carlton trail lies along the latter river, and leaves the township in Section 32. The northern sections are rather dry. The east is rolling and hilly and very marshy, with many poplar and willow bluffs. Along the south the soil is light and sandy and under class 2. A lake lies on Section 3.—*H. F. Bray*, 1882.

36. Outlines.—The soil is composed of heavy black loam. Water is fresh, but scarce beyond the river. For the purposes of fuel, there is drift wood on the Saskatchewan, which crosses Section 34, and clumps in some of the sheltered places along the river banks.—*W. A. Ashe*, 1882.

Open, gently rolling country. The south part of Section 6 is rather hilly, with a light, sandy soil, third class. The balance of the west line is first and second class land, having good sand and clay loam soil. The South Saskatchewan River is crossed in Sections 7 and 18, and is about a quarter of a mile wide, with swift current and stony bed generally. The river bed is about 75 feet below prairie level, the east bank being abrupt, but the west bank slopes gently down to the water's edge. A little wood (poplar, birch, cottonwood, &c.) is found along the river at this point, which is near the extreme north end of what is called the Moose Woods.—*F. W. Wilkins*, 1883.

Open prairie. Class 2. The Saskatchewan River crosses the line in Section 34. The bank is about 50 feet high, with a few trees scattered along the sides, but no timber of any size. In Section 35 a cart trail crosses the line.—*J. S. Dennis, Jr.*, 1878.

Sub-division.—Is divided into two parts by the Saskatchewan River. The land on the western side is rolling prairie, with excellent clay loam soil. On the eastern side, it is rolling prairie, dotted with poplar and willow bluffs. The soil is a sandy loam. The marshes are generally small and shallow, with good water. The eastern bank of the river is about seventy feet high, and is heavily wooded. The western bank is about forty feet.—*H. F. Bray*, 1882.

- 37. Outlines.**—The soil is a heavy black loam, and although water is scarce, what there is is fresh. There is some stunted bluffs of trees along the River Saskatchewan, which crosses the southern boundary.—*W. A. Ashe*, 1882.

Along the centre, the country is open prairie with a second class soil. The banks of the Saskatchewan are about 50 feet high, with a few trees scattered along the sides, but no timber of any size.—*J. S. Dennis, jr.*, 1878.

Undulating surface, sloughs shallow. The South Saskatchewan River crosses the south-east angle of the township. There is very little timber along the banks of the river. A few granite and limestone ridges enter the township in Sections 24 and 25. Soil, generally firstclass.—*A. G. Cavana*, 1883.

Sub-division.—Rolling prairie, in some places very wet. The South Saskatchewan River enters Section 3 and leaves at Section 25, with a current of about $3\frac{1}{2}$ miles; water, muddy; banks 15 to 100 feet high, which are, on the west side, very much broken by ravines, and in many places clothed with small poplar and willow. East of the river the surface is very stony, with limestone boulders, except Sections 1, 2 and 3. West of the river the surface is covered with small rolling stones. The centre has good soil, is rather wet, and has fair vegetation. The township generally west of the river is 1st and 2nd class for agriculture.—*F. L. Blake*, 1883.

- 38. Outlines** —East and west, open prairie, with level surface. The soil is a clay loam, on clay subsoil, except at the north-western part of the township, where the soil becomes lighter, and in places gravelly. It is rated first and second class. There are a few clumps of poplar trees on the north-east part of the township, Section 36.—*A. G. Cavana*, 1883.

Sub-division.—This township is a gently rolling prairie. The eastern half contains some very good land, but is rather wet from the overflow of water from Township 39. In its present state it will make good grazing lands, but it could easily be drained into the South Saskatchewan. The two tiers on the west are level prairie, full of badger mounds and stones half buried in the ground. Soil, very poor and shallow, over a stony and gravelly subsoil. The old telegraph line to Edmonton and cart trail traverses the northern tier of sections. The soil along the southern boundary is a sandy loam, from 3 to 6 inches deep, and well up to class 1. The north has some large hay marshes, and the soil is between classes 2 and 3. The north-eastern sections are rather stony.—*F. L. Blake*, 1883.

- 39. Outlines.**—The north boundary is rolling prairie, with an alluvial soil resting, 8 inches deep, on a gravel subsoil, class 1; water scarce.—*C. Carroll*, 1882.

Sub-division.—Gently rolling prairie, full of innumerable hay marshes; extremely wet in spring, but drying up during the summer. Section 35 has one of these large hay marshes on it, nearly dry in summer. Sections 1, 2, 11 and 12 are level hay lands. Willow and poplar, 5 to 20 feet high, abound in the

eastern part and towards the western boundary, and a low growth of willow is generally distributed throughout the township. The south-west has a very stony surface. The township would, in its present state, only make grazing lands. The soil is a sandy loam, from 2 to 6 inches deep, on a clay subsoil; classes 2 and 3. Section 12 is sandy, with scant vegetation, and the south-east portion is rather stony on the ridges.—*F. L. Blake*, 1883.

40. *Outlines*.—The north boundary is level prairie, very flat, with many ponds and marshes, and a light, sandy soil.—*G. B. Abrey*, 1882.

Sub-division.—The soil in the easterly part is sandy loam, of fair quality. The westerly part is more uneven and gravelly. There is very little wood; some small islands of poplar or aspen occur towards the north. There is a large slough in the south-east, which extends into the next township, but generally water is scarce and there are no creeks. The soil is class 2, but along the south and east it is class 1.—*C. Carroll*, 1882.

41. *Outlines*.—The south boundary is level prairie, very flat, with many ponds and marshes, and with a light, sandy soil.—*G. B. Abrey*, 1882.

Sub-division.—Has many ponds and sloughs, and is probably better adapted for grazing than farming. There is a large alkaline lake on Sections 15 and 22, and another on Section 35. The west and the north-west is not so wet, and the water in the sloughs is about of the average quality of slough water. The surface throughout is generally rolling prairie with a sandy loam soil, which is covered with a growth of willows and scattered poplars.—*W. C. Eaton*, 1883.

42. *Sub-division*.—This township is all prairie, covered with poplar and willow bush, and is generally suitable for agriculture. In many of the bluffs there exists a depression which contains water at some or all seasons of the year. There are four lakes in the township, all alkaline; one of these is quite a large one and breaks on Sections 29, 32 and 33. The soil throughout is a sandy loam. The Duck Lake trail crosses east and west about the centre of the township. There is a creek in Section 36 flowing east.—*W. C. Eaton*, 1882.

43. *Sub-division*.—The surface is rolling and the soil is a sandy loam, and well adapted for farming. There is a chain of lakes, originating in the township south of this, which are all alkaline. These extend from Sections 4 to 23; and from thence, flowing northwards and leaving by Section 35, there is a small creek, which, in part, drains these lakes. On Sections 18 and 19 there is a deep ravine, which is considered a good mill site, as there is a continuous flow of water, which could be made to carry a good head. This creek flows to the Saskatchewan River in the north-west corner of the township. This river is here about 30 chains wide. What is known as the Assiniboine Hill lies on Sections 34 and 27. The Battleford and Carlton trail from Sections 6 to 35.—*W. C. Eaton*, 1883.

- 44. Outlines.**—Along the north the soil is generally of a high average, consisting of an excellent sandy loam, with clay subsoil. Wooded with poplar, to a satisfactory extent, both for building, fencing and fuel purposes. Excellent water was found.—*W. A. Ashe*, 1883.

The north-east sections are very much broken up by the North Saskatchewan River. West of the river the soil is poor, and as it approaches the west side of this township it becomes wet and low. It is undulating prairie, gradually rising, the level of surrounding country being attained near centre of Section 35. There are scattered poplar bluffs. Section 31 is low and wet, and covered with willows. The soil, generally, is much inferior to land upon east side of river. Owing to the numerous moving sand-bars, the Saskatchewan at this point will always be difficult to navigate.—*C. A. Bigger*, 1882.

Sub-division.—Contains a growth of brush and poplar bluffs and is traversed in a north-easterly direction by the River Saskatchewan, the banks of which are steep and high, and fringed with a growth of poplar, spruce and willow. That portion of the township south-east of the river is considerably broken with ravines, but is dry, and suitable for agriculture. The other side of the river is better hay land.—*W. C. Eaton*, 1883.

- 45 Outlines.**—The soil along the southern boundary appeared to possess a high average, being an excellent sandy loam, with sufficient poplar for building, fencing and fuel. Water good.—*W. A. Ashe*, 1883.

The southern portion of this township, near to the boundary, has, generally, a poor soil. Section 1 is broken by the ravines of the Saskatchewan River. The surface gradually rises to Section 2 and then falls to the west. Towards Sections 5 and 6 the ground is very wet and low, and covered with willows. The soil, generally, consists of a sandy loam, covered with scattered poplar bluffs.—*C. A. Bigger*, 1883.

Sub-division.—Rolling, and low bottom land; in portions, densely, and, in other portions, sparsely covered with willow, hazel and poplar. The soil in places is extra rich, 18 to 20 inches of clay loam; and in other places lighter, being sandy loam and, generally, class 2. The Township is liberally dotted over with marshes and ponds of fresh water, and is suitable for farming.—*F. Murphy*, 1882.

- 46. Sub-division.**—Very similar to Township 45 in surface, soil, wood and water. There is a network of trails crossing the township. The soil is generally a good sandy loam on sandy subsoil; a good class 2; but there are parts of the north-west and the west having a good clay loam of 18 to 20 inches deep. A good township.—*F. Murphy*, 1883.

- 47. Sub-division.**—This is a good township for agriculture and settlement. In regard to its surface, soil, water and wood, it is very similar to Townships 45 and 46 of this range.—*F. Murphy*, 1883.

48. Outlines.—Eastern half is rolling land. Western part is more level, with numerous sloughs and wet grass marshes; soil throughout is a black vegetable loam, with a clay or sand subsoil; timber is either in belts or clumps, of a fair size for fuel or rails. The soil in places is 24 inches, on subsoils of sand, clay, black muck and black loam; classes 2 and 3; spruce, tamarac, poplar and balm of Gilead timber; also poplar and willow scrub. Timber on this line ranges from 4 to 20 inches in diameter. In Section 33 the line is crossed by a creek.—*A. G. Cavana*, 1882.

Sub-division.—This is an excellent township, very similar in surface, soil, water and wood to Nos. 45, 46 and 47. It is, perhaps, rather lower and contains more marshes, but these are producing rich and excellent hay crops, and for the present, at least, it is a splendid grazing township.—*F. Murphy*, 1883.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE VI.

7. *Outlines.*—The most of this township consists of a large valley, through which the south branch of the Old Wives' Creek flows, with numerous coulees draining into it. Sand hills are to be found in the north-west corner. Soil, sandy loam, with chiefly clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
8. *Outlines.*—The northern half is much cut up by the south branch of Old Wives' Creek, and one of its tributaries forming a junction with the main branch near the eastern boundary. The southern half may be ranked as heavily-rolling prairie, with sand hills in the south-west corner. Soil, sandy loam with clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
9. *Outlines.*—The south boundary passes along the northern bank of the wide depression through which the branch of Old Wives' Creek runs. Numerous hills and dry watercourses : clay subsoil. On the ridges, boulders and stones are in abundance. Water scarce and grass burnt.—*T. Fawcett*, 1882.
West : gently rolling prairie, with numerous ponds and marshes containing fresh water. The soil is a hard clay.—*A. F. Cotton*, 1883.
10. *Outlines.*—The western sections are rolling prairie, with a few fresh water marshes and ponds. The soil is a hard clay.—*A. F. Cotton*, 1883.
The eastern part is rolling and hilly prairie. Soil, sandy loam, from 5 to 7 inches deep, with a clay subsoil ; class 2. Sections 1, 12 and 13 are broken by ridges ranging from 20 to 50 feet in height. A large pond was crossed in Section 24.—*A. O. Wheeler*, 1883.
11. *Outlines.*—Along the east the surface is undulating prairie. The soil is a poor clay, supporting very little grass. The west is rolling prairie. Soil, a clay loam.—*A. F. Cotton*, 1883.
North part of the country is somewhat hilly and broken by ridges ; the soil varies from sandy to clay loam, in most cases on a clay subsoil. Water mostly alkaline.—*W. T. Thompson*, 1882.
12. *Outlines.*—Surveyed east and west of this township. The former is undulating prairie, with a soil which varies from a sand to a clay loam, all very hard. The west is gently-rolling prairie with a clay loam soil. Old Wives' Creek crosses this township from west to east, but is only a succession of pools, with a soft mud bottom. The trail to the Cypress Hills also crosses the southern row of sections.—*A. F. Cotton*, 1883.
13. *Outlines.*—Soil third class. Surface broken, being sand hills close together. There are some places, however, where they are more scattered, but the ground is still much broken. There are many

small marshes in the north-east, and in most of them the water is good.—*A. C. Talbot*, 1882.

The south is inclined to roughness, being broken by ridges. The soil varies from a light sand to a clay loam.—*W. T. Thompson* 1832.

Sub-division.—North-east part hilly and broken. The north branch of Old Wives' Creek enters at Section 18 and leaves at 1. The valley of the creek and lower levels of the township are alkaline. There is no wood and no good water, except in the pools of the creek.—*W. Chipman*, 1883.

14. Along the west boundary the surface is level. Suitable for the cultivation of wheat. The subsoil is clay loam, with gravel in places.—*J. G. Sing*, 1882.

North-east and south, the surface is broken and hilly, and has many small marshes—which are generally fresh—in the south-easterly quarter, and in the north centre. The soil is third class.—*A. C. Talbot*, 1882.

Sub-division.—Soil, generally, class 3, with some portions of Sections, class 2. A continuous dry valley, with steep banks, extends from Section 32 to Section 3. East of this valley is very hilly, broken by marshes and muskegs, and west of it, for about a mile, the surface is similar, the hills being rounded, with the tops and sides covered with stones and gravel.—*W. Chipman*, 1883.

15. *Outlines*.—Surveyed all the boundaries. The north, north-west quarter and the south centre are broken and hilly, the balance is rolling, with inclinations to hilliness. Marshes are fairly scattered about, except in the north-east quarter, and on Sections 7 and 18 there is a large lake.—*A. C. Talbot*, 1882.

Sub-division.—Rolling prairie, soil second class, of sandy loam and sandy subsoil, generally good for grazing, and some parts of it well adapted for agriculture. Water is scarce.—*P. C. Talbot*, 1883.

16. *Outlines*.—In the north portion of this township the soil becomes better than in the townships eastwards, but the surface is still broken by many hills and lakes. Of the latter some are fresh and some alkaline. Old Wives' Lake submerges the north-east quarter of Section 36.—*Fawcett*, 1882.

The soil is third class. The surface is very broken by sandy elevations close together. There are many small marshes; and in most of them the water is good.—*A. C. Talbot*, 1882.

Sub-division.—Surface rolling and hilly, soil, sandy loam, on sandy subsoil, with some boulders, class 2. No timber, and water scarce towards fall; is not likely to be eligible for settlement for a few years, or until the occupation of all better land forces settlers into it.—*H. H. Robertson*, 1883.

17. *Outlines*.—The northern portion is very hilly, being part of the Grand Coteau. The soil is varied, many places being very gravelly and stony, and some sandy. Other portions are clay loam, with a clay subsoil. Quite a number of springs run out of the larger hills; some of them contain very good water. The

vegetation in this township, though hilly, and in many places rough, is good, and will afford a fair pasture for cattle and horses. No timber.—*L. Bolton*, 1882.

South, many hills and lakes; of the latter, some are fresh and some alkaline. West, hilly to rolling; soil, sandy loam; pasturage, fair.—*T. Fawcett*, 1882.

Sub-division.—Soil, sandy to sandy loam; class 3. Not suitable for settlement, although pasturage good in early summer. The greater part of the township is taken up by Old Wives' Lake, along the shore of which the C. P. R. traverses the township. Wild geese, duck, pelicans and other water fowl abound.—*G. C. Rainboth*, 1883.

- 18. Outlines.**—Very hilly, being part of the Grand Coteau. The soil is variable, being gravelly, stony and sandy; other portions are clay loam, with a clay subsoil. Water is very plentiful in sloughs and small lakes. In many of the lakes the water is not good, being impregnated with different kinds of salts. Numbers of springs run out of the larger hills. The vegetation in this township, though hilly and in many places rough, is high and luxuriant, and will afford good pasture for cattle and horses. No timber.—*L. Bolton*, 1882.

The northern portion is very rough and hilly. The numerous small hills, grass swamps and ponds will interfere much with profitable tillage of the soil, but there is a luxuriant growth of grass. The soil is chiefly a sandy loam on a sandy subsoil, with gravelly ridges.—*H. B. Proudfoot*, 1883.

Sub-division.—Soil, classes 2 and 3, the former class covering three-quarters, and the latter one-quarter of the township, being sandy and clay loams on clay, sand and gravel subsoils. Being situate in the "Coteau du Missouri" the surface is rolling, rough and broken. Fresh ponds and marshes are numerous and pasturage is fair, but there are no sheltering woods or valleys.—*G. C. Rainboth*, 1883.

- 19. Outlines.**—Very rough and hilly. The surface throughout is covered by innumerable small hills, grass swamps and ponds, which will render it unfit for agricultural purposes, except grazing, there being a most luxuriant growth of grass. The soil is very changeable, a sandy loam with sandy subsoil predominating. The tops of many of the sand hills are very gravelly, with some large stones.—*H. B. Proudfoot*, 1883.

Sub-division.—Is a rolling prairie, with numerous grass swamps or sloughs. The soil on the east and west portions is a sandy loam, and in the centre a clay loam, and rates class 2, except on the western side, where it rates class 3, being dryer and more sterile. Is best suited for grazing.—*E. J. Rainboth*, 1883.

- 20. Outlines.**—Very rough and hilly. The surface throughout is covered by innumerable small hills, grass swamps and ponds, which will render it unfit for all agricultural purposes, except grazing, there being a most luxuriant growth of grass. The soil is very changeable, a sandy loam with sandy subsoil predominat-

ing. The tops of many of the sand hills are very gravelly, with some large stones.—*H. B. Proudfoot*, 1883.

In Section 35 the north line crosses a stream which has no perceptible current. Sections 34, 33 and 32 rise to the Coteau by an easy ascent. Soil of fair quality, but land is broken to some extent by hills.—*E. Bray*, 1882.

Sub-division.—Is a rolling prairie, hilly and broken in and around the valley of Thunder Creek, in which lies an alkaline lake about $3\frac{1}{2}$ miles long by $\frac{1}{2}$ mile broad. The soil varies from a sandy to a clay loam, and ranks second and third class. The township is better adapted for grazing than agricultural purposes.—*E. J. Rainboth*, 1883.

21. *Outlines*.—On all the boundaries the surface is dry, rolling prairie. Soil, heavy clay, with clay subsoil. Class 2. Cart trail crosses the west line in Section 18. A small marsh was crossed in Section 33. A creek, flowing south, crosses the south line in Section 2.—*T. R. Hewson*, 1882.

In Section 2 the south line crosses a sluggish stream. Sections 3, 4 and 5 rise to the Coteau by an easy ascent. Soil, of fair quality, but the land is broken to some extent by hills.—*E. Bray*, 1882.

Sub-division.—Sandy loam over sandy subsoil. Rates scarcely class 2. Is poor agricultural land, but some good grazing in the low lying places. Water is scarce. No wood whatever.—*F. E. Brunelle*, 1883.

2. *Outlines*.—The south, east and west boundaries are dry, rolling prairie. Soil heavy clay, with clay subsoil, class 2. A small marsh was crossed in Section 4, Swift Current and the Elbow trail in Sections 30 and 31, and a marsh in Section 24.—*T. R. Hewson*, 1882.

North-west the surface is undulating, but north-east it becomes higher and rolling, the soil being chiefly a second class clay loam. Permanent water, in sloughs, in the higher lands, is plentiful. The cart trail to the Elbow crosses the line in Section 31.—*J. F. Garden*, 1882.

Sub-division.—Very similar in all respects to Township 21 of this range.—*F. E. Brunelle*, 1883.

23. *Outlines*.—Northwards the surface is dry and undulating, the soil being principally a light loam and 2nd class. In Section 33 there is a coulée having some wood and water in the bottom. The surface in the south-west is undulating, but eastward it is higher and rolling, the soil being chiefly a second class clay loam. Permanent water, in sloughs, in the higher land, is plentiful. Going south, by the east boundary, the country is open and rolling for a mile, but high ranges or hills of 700 feet in height occur in the next three miles. The remaining two miles are rolling or undulating; the soil throughout being from a sandy to a heavy clay loam, and class 2. Permanent water, in sloughs, was found. Southward, on the west boundary, for four miles the surface is dry, open prairie, with a second class sandy loam soil. In

Section 7 there is a large slough, south of which the land improves to a first-class clay loam soil.—*Jas. F. Garden*, 1882.

Sub-division.—Soil similar to Townships 21 and 22 of this range, except a few sections of the western tier, where there is a good clay subsoil. South and south-east the surface is undulating, not rough, but in long gradual slopes. Elsewhere it is level, except two steep hills on Sections 24 and 25. A creek traverses the north-eastern part of the township, along which there is a thick growth of scrub. A large marsh extends from the north-east quarter of Section 19 to the south-east quarter of Section 28. The Swift Current trail to the Elbow crosses the township.—*J. Burke*, 1883.

- 24.** *Outlines*.—Sand hills extend from the north-east to nearly the middle of the township. Upon these hills a small growth of poplar and scrub exist; while the sand in places is blown into large heaps with no vegetation on them. The land improves to the north-west.—*T. Kains*, 1882.

On the south boundary the surface is dry and undulating, the soil being principally a light loam and 2nd class. In Section 4 a coulée was crossed having some wood and water in the bottom. Going south, on the east boundary, the land is of a poor fourth class, sand soil as far as the South Saskatchewan River, which is crossed in Section 24. The river here is about 30 chains wide, running in a valley about $1\frac{1}{2}$ miles broad and approximately 250 feet deep. The bed of the stream has numerous shifting sand bars. The current runs at the rate of $2\frac{1}{2}$ or 3 miles an hour. The water is shallow except in the channel, where it is from 7 to 10 feet. Cherry and poplar are found at the edge of the valley, and in it, cottonwood, poplar, maple and cherry, some of the cottonwood measuring 14 inches diameter. South from the river the land is open, undulating, sandy soil, and third class. The country northwestwards, as far south as the Saskatchewan, is an open sandy plain, with a good growth of grass, and class 3. Poplar and native maple—some of it 14 inches in diameter—occurs on the edge of the river valley.—*J. F. Garden*, 1882.

Sub-division.—Traversed in an easterly direction by the South Saskatchewan River. South of the river, the soil is a light sandy loam on sandy subsoil. A creek which has very steep banks covered with a thick growth of small poplar and scrub enters on Section 4, and empties into the river on Section 9. North of the river, the township is composed of sand hills, and has light vegetation.—*J. Burke*, 1883.

- 25.** *Outlines*.—Along the east boundary it is level prairie, rising toward the north. Section 1 is sand hills, partly covered with poplar brush; class 4. The Saskatchewan River crosses the line in the north half of Section 12 and the south half of 13. An island covered with poplar, willow and balm of Gilead bush divides the stream almost in the centre. The river, from bank to bank, including the island, is over 40 chains wide. The banks are about 300 feet high. North of the river the soil is sandy

loam, from 4 to 6 inches deep, with sand subsoil. Classes 2 and 3., Rather dry.—*J. A. Maddock*, 1883.

The south is rolling and broken prairie, with numerous sand hills. Class 4. Several grass swamps and some wet marshy land were seen, and in Section 5 a large pond was crossed. South-eastwards a small growth of poplar and scrub exists, but the sand in most places is blown into large heaps, with no vegetation. The land improves to the westward.—*T. Kains*, 1882.

Sub-division.—The South Saskatchewan River crosses the township in a north-westerly direction, varying in width from half to one mile. South of the river is sand hills, and here and there small poplar and scrub, with some larger poplar along the river bank. North of the river the soil is heavier, but still too light for farming. The country is rolling and undulating prairie.—*J. Burke*, 1883.

26. *Outlines.*—The eastern tier of sections are rolling, with a sandy loam soil, 6 inches, on a clay and sandy subsoil. Class 1. Section 1 is a rich dark loam, on a clay subsoil. Surface water scarce. The west boundary is rolling prairie. Soil, sandy loam, from 4 to 6 inches deep, with sand subsoil. Classes 2 and 3. Saskatchewan River crosses the line in Sections 18 and 19. In Sections 7 and 18, the line crosses ravines, containing ash, willow and poplar, from 3 to 12 inches in diameter, with streams of good spring water running in the bottom. A large ravine, 75 feet deep, is crossed in Section 31.—*J. A. Maddock*, 1883.

South boundary is rolling and undulating prairie. Soil is sandy loam, with sandy subsoil. The South Saskatchewan River crosses the line between Sections 5 and 6.—*J. Burke*, 1883.

Sub-division.—Is an undulating prairie, except the south-west quarter, which is broken by the Saskatchewan River. Soil, light sandy loam on sandy subsoil; class 2. The river is 30 to 40 chains broad, with a current of about 4 miles an hour; is very clear and fresh; has banks about 250 feet high, covered with brush and some poplar. In the western part of Section 31 is a gully about 40 feet deep, in which is poplar from 3 to 6 inches in diameter.—*M. J. Charbonneau*, 1883.

27. *Outlines.*—Is heavily rolling prairie in its northern and eastern parts, and to the south-west slopes gently towards the Saskatchewan River; this part is cut up a good deal by deep ravines containing bush. Soil, a good sandy loam, with clay subsoil, which becomes poorer, and has a sandy subsoil on approaching the river in the south-west. The soil west is classes 2 and 3, and eastward, classes 1, 2 and 3.—*J. A. Maddock*, 1883.

Sub-division.—Undulating prairie, broken in the west by gullies and hills. Soil, from class 1 to class 2, generally sandy loam on sandy subsoil; fairly adapted for farming. The water in the sloughs and marshes is fresh. There is some poplar in the south-west corner of the township, from 3 to 6 inches in diameter, fit for fuel. The mail carriers' trail crosses the township.—*M. J. Charbonneau*, 1883.

- 28. Outlines.**—The north is high rolling prairie, somewhat knolly in places, with a few grass swamps, generally of small area, containing good fresh water. Soil is generally first class, being a good clay loam, with clay for subsoil.—*T. Kains*, 1882.

The south is undulating prairie. Soil, sandy loam, about 12 inches deep, with clay subsoil; class 1. The mail carriers' trail crosses the line in Section 6. No water.—*M. J. Charbonneau*, 1883.

The west and east sections are rolling prairie. Soil, sandy loam, from 6 to 9 inches deep, with a clay subsoil; class 2. Water is plentiful along the west, but scarcer along the east.—*J. A. Maddock*, 1883.

- 29. Outlines.**—The west boundary is rolling and level prairie. Soil, sandy loam, about 6 inches deep; clay subsoil; Class 2. The land in Section 31 is slightly alkaline, and water is scarce all along the line.—*J. Maddock*, 1883.

The south boundary is rolling prairie. Soil, sand and clay loam, from 3 to 12 inches deep, with clay subsoil. Class 1. A number of fresh water grass swamps of small area were crossed.—*T. Kains*, 1882.

The east is undulating and level prairie. Alluvial soil, from 8 to 18 inches deep, with clay subsoil. Class 2. Water is scarce.—*D. C. O'Keeffe*, 1882.

- 30. Outlines.**—The west is rolling and level prairie. Soil is a sandy loam, about 6 inches deep, with a clay subsoil. Class 3. The south-west corner is slightly alkaline. The north of Section 7, all of 18 and 19, is a large slough.—*J. A. Maddock*, 1883.

Along the east the surface is undulating and rolling prairie. Alluvial soil from 13 to 18 inches deep, with clay subsoil. Class 2. Water is scarce.—*D. C. O'Keeffe*, 1882.

- 31. Outlines.**—The west is open, rolling prairie, with some low hay land in Section 18, and also some very light, sandy land in Sections 18 and 31. Fourth class. The rest of the sections along the west line is second class, having a fair, sandy loam soil. The South Saskatchewan River is crossed in Sections 30 and 31, and is about a quarter of a mile wide, with a swift current and stony banks. The bed of the stream is a good deal obstructed by sand bars, and is depressed below prairie level 100 feet. The banks of the river are steep on both sides, and have some good wood along them, more especially so on the southern side.—*F. W. Wilkins*, 1883.

Along the east boundary, Sections 25 and 36 are in the Sand Hills. Soil and subsoil, sand, and water scarce. Class 4. Green and dry poplar, willows and scrub were found. Sections 24, 13, 12 and 1 are level prairie. Soil, clay and sandy loam, about 9 inches deep, with sand subsoil. Classes 2 and 3. Water good.—*D. C. O'Keeffe*, 1882.

- 32. Outlines.**—Going west, on the north boundary, the first mile is good sandy loam land. In Sections 34 and 35 the line crosses the south branch of the Saskatchewan River, which is here

divided by islands into three distinct channels. The soil near the river and on the islands is a poor, light sand, and is covered with a dense brush of willow and poplar. The remaining north-western sections are rolling prairie, with good soil.—*E. Bray*, 1883.

Sand hills. The soil and subsoil is sand. Class 4. Water is scarce. Surface dotted with clumps of poplar, willow and scrub. Trail from Sioux Reserve to Touchwood Hills was crossed in Section 12.—*D. C. O'Keefe*, 1882.

Along the west boundary it is open, rolling prairie, with rather light sandy soil, and generally third class.—*F. W. Wilkins*, 1883.

Sub-division.—The surface of this township is generally level. There is a belt of sand hills which crosses the township in a diagonal direction, and which is covered with a growth of poplar. This belt is about three-quarters of a mile wide. The soil is of various kinds and grades, being a black clay loam, sandy clay and clay, all averaging class 2. There is a good supply of surface water—August.—*C. C. Duberger*, 1884.

- 33.** *Outlines.*—As it appeared from the southern boundary, Section 1 has a good sandy loam soil. Sections 2 and 3 are broken by the Saskatchewan, which has been already described in Township 32. The sections west of the river possess a good soil, and are rolling.—*E. Bray*, 1883.

The east boundary is level prairie. Soil, sandy loam, about 8 inches deep, with sand subsoil. Class 1. Sections 36, 25 and the north half of 24 is a large marsh, with willow scrub in places.—*H. F. Bray*, 1882.

The west boundary is a knolly country, with very light sandy soil, and fourth class. A good deal of wood (poplar and willow), generally of small size, was found along this line.—*F. W. Wilkins*, 1883.

Sub-division.—The east is low bottom land, and very wet. Young poplars and willows are found in great quantity along the River Saskatchewan, which crosses the township. This river is here about 10 feet deep, with a 5 mile current, and flanked with bottom-land shores about 12 feet high. Beyond the vicinity of the river the land is rolling, and has scattering clumps of poplar, with a class 1 and 2 soil. Northwards it is rolling prairie, scattered with bluffs of poplar and willow. Cart trails cross the line in Sections 32 and 36. In Section 35 is the South Saskatchewan. In Section 33 is a large fresh water marsh.—*C. C. Duberger*, 1884.

- 34.** *Outlines.*—East rolling prairie, scattered with bluffs of poplars and willows. The line is crossed in Sections 1, 25 and 36 by a trail. Sections 1 and parts of 11 and 12 are in an Indian Reserve.—*H. F. Bray*, 1882.

The west boundary is entirely in sand hills, with clumps of poplar wood in the valleys between the hills. Some of this timber is of good size. Soil, fourth class.—*F. W. Wilkins*, 1883.

Sub-division.—The Saskatchewan River flows through this township from south to north, breaking upon the central tiers of sections. It has a channel 8 to 10 feet deep and a 5 mile current. An island in the centre of the river, densely covered with wood, forms most of Section 22 and half of 27. The river flats extend from one to two miles on each side of the river. In these flats are large quantities of willow, and there are also poplars 4 to 12 inches in diameter. The township is generally rolling prairie, scattered with bluffs of poplar and willow. A large fresh water marsh, averaging about one-third of a mile wide, extends through the second westerly tier of sections, from the south to the north of the township. Between this marsh and along the base of the river terrace—which is about 75 feet high—lies the river cart trail. The south-east corner of the township is an Indian Reserve.—*C. C. Duberger*, 1884.

- 35. Outlines.**—Along the north boundary it is rolling prairie, alternating with sand hills. Soil, sandy loam. Class 3. In Sections 34 and 35 large timber has been burnt and lies fallen, and a thick growth of willows and poplar, from 15 to 20 feet high, has grown up. Small clumps of large poplar are left in places.—*F. L. Blake*, 1883.

The east boundary is much broken by the Saskatchewan and its valley. Section 1 is scrubby sand hills. The river passes out by Section 12, courses on the east of the eastern boundary and enters again on Section 36. The line is covered with poplar scrub, and in places is very sandy, and not much above class 3.—*H. F. Bray*, 1882.

The west boundary is in a knolly to a hilly country, with light sandy soil; fourth class. A good deal of poplar and willow wood was found along this line.—*F. W. Wilkins*, 1883.

South, rolling and in places sandy. Occasional clumps of poplar and willow. Trail crosses the line in Section 5. A lake was crossed in Section 4 and the South Saskatchewan in 3.—*F. Vincent*, 1884.

Sub-division.—The west part is hilly, but the east part is level. The soil in the west is generally very light, but in the east it is a good black loam, with a clay subsoil; a very good second class. The following sections are crossed by the South Saskatchewan River, viz.: 36, 25, 10, 11, 12, 1, 2 and 3. Bluffs of poplar occur nearly all over the township; some of these poplars may be used in the construction of small houses. The west part is very dry, but the east is well supplied with water, being low for several miles west of the river.—*F. Vincent*, 1884.

- 36. Outlines.**—Northwards the soil is a heavy black loam; surface water good and fresh. Some small poplar and brush wood.—*W. A. Ashe*, 1882.

The east boundary is open, gently-rolling country. The south part of Section 1 is rather hilly, with a light, sandy soil; third class. The balance of this line is first and second class land, having good sand and clay loam soil. The South Saskatchewan River crosses Sections 12 and 13, and is about a quarter of a mile

wide, with swift current and stony bed, and is here about 75 feet below prairie level. The east bank is abrupt, but the west bank slopes gently down to the water's edge. A little poplar, birch, cottonwood, &c., was found along the river at this point, which is near the extreme north end of what is called the Moose Woods. The west sections are in gently-rolling, open prairie. Section 6, and the south half of Section 7, are springy and boggy; fourth class. The other sections are first class, with good black, sandy loam soil. A small creek crosses Section 7, flowing south-east.—*F. W. Wilkins*, 1883.

Sub-division.—Gently-rolling prairie, covered with brush, and interspersed with fresh marshes. On Sections 33, 27, 22, 14 and 11 an alkaline depression occurs, filled with marshes and ponds. The extreme south-west corner is flat, alkaline and wet. On Sections 4, 3 and 2 a series of sand ridges extends southwards, which are covered with a dense growth of young poplar, 10 to 30 feet high. The Saskatchewan River runs through the south-east corner of the township, is wide and shallow, has a current of about $2\frac{1}{2}$ miles per hour, and has an easterly bank of about 75 to 100 feet high, sandy and rugged. On Section 2 a descent from the prairie level to the river flats takes place. These flats take in parts of Sections 1, 2, 11 and 12, and are level and of good soil, but covered with a dense growth of tangled poplar, willow and rosebush, 10 to 20 feet high. The central and northern sections are good land, but need draining.—*F. L. Blake*, 1883.

- 37. Outlines.**—The north is bushy and level prairie. Soil, clay loam from 5 to 10 inches, clay subsoil. Class 1. The land along this line is stony in places. Numerous clumps of willow and small marshes were seen.—*J. Doupe*, 1883.

The southern portion contains a heavy, black, loamy soil, with good and fresh water, and some small poplar and brush-wood.—*W. A. Ashe*, 1882.

Centre, prairie, with scattered bluffs of poplar and clumps of small willows. Class 2.—*J. S. Dennis, Jun.*, 1878.

The sections along the east and west boundaries are open, level prairie, with numerous shallow sloughs, generally bordered with willows. Soil, first class. The west is more bushy than the east.—*A. G. Cavana*, 1883.

Sub-division.—Surface is a level and gently undulating brush prairie, interspersed with numbers of willow swamps, which are, in the western sections, usually surrounded with small bluffs of poplar, fit for fuel only. Soil, throughout, a beautiful, black, mouldy clay loam, with clay subsoil. Class 1. Water fresh, except in a series of small lakes and marshes which drain through Sections 30, 19, 20, 17, 9 and 4. This is a good township for farming purposes. The soil yields a most luxuriant growth of fall grass.—*J. Doupe*, 1883.

- 38. Outlines.**—The soil of the south-eastern part of the township is a clay loam, with a clay subsoil. Rated first-class. The north-western part of the township is a sand loam, with a clay subsoil. Rated second-class. The south eastern part of the township is

timbered with poplar and willow. Some of the poplar is of sufficient dimensions for rails or fuel.—*A. G. Cavana*, 1883.

Sub-division.—Brushy, undulating prairie. Soil, class 1, clay loam with clay subsoil. The surface is dotted with clumps of willow and small poplar, and also willow marshes. The easterly one-third of the township is stony. The growing poplar is only large enough for fencing and fuel, and is in limited quantity. All the water is good, but scarce towards the close of the summer, as there are no large swamps in the township. This township will make an excellent one for farming. The old telegraph line crosses the northern tier of sections, and the trail to Gabriel's Ferry the north-west corner. Alongside the telegraph line there is a cart trail.—*J. Doupe*, 1883.

39. *Outlines*.—The south is rolling and level, with clumps of willow and small poplar. Soil, clay loam, from 3 to 11 inches deep, with clay subsoil. Class 1. Trail from Gabriel's Ferry crosses the line in Section 4. The line also crosses several wet willow swamps.—*Jos. Doupe*, 1883.

The east boundary is rolling prairie, with hay marshes. In Sections 13, 12 and 1 stony ridges were found. Soil, sandy loam, about 5 inches deep, with sandy and gravelly subsoil. Class 2. Trail crosses the line in Section 24.—*F. L. Blake*, 1883.

The west boundary is open, rolling prairie. Soil, clay loam, about 3 inches deep, with clay subsoil. Class 1. Several large willow-fringed sloughs were crossed.—*A. G. Cavana*, 1883.

Sub-division.—Is a gently-rolling-prairie, thickly dotted over with willows and brush, with, in the northern part, numbers of small bluffs of poplar and willow. The easterly third of the township has some small round stones, increasing to very stony at the south-east corner. Soil, a fine clay loam, except Sections 4, 5, 8 and 9, where there is a slight mixture of fine sand. Ponds and marshes are scarce, but fresh. This township is a first-class one for agricultural purposes.—*J. Doupe*, 1883.

40. *Outlines*.—The north is level prairie, very flat, and dry, sandy soil. Bluffs of poplar scattered about on the westerly half.—*G. B. Abrey*, 1882.

Eastwards, rolling prairie. Alluvial soil, about 8 inches deep, with gravel subsoil. Class 2. Water scarce.—*C. Carroll*, 1882.

Westwards, rolling prairie. Soil, clay loam, about 3 inches deep, with clay subsoil; class 1. Sloughs, bordered with willow, were crossed. The south-western part is dotted with clumps of poplar and willow.—*A. G. Cavana*, 1883.

Sub-division.—Gently-rolling land, all class 1, partly bushy, and thickly dotted with small bluffs of small poplar and willow, particularly the western two-thirds. About the centre of the township a limited quantity of building timber exists. The soil is fine clay loam, on clay subsoil, and is first class farming land. The marshes are small and shallow, and well distributed. The water is fresh, and no indications of alkali; the grass long and

luxuriant, and well water, obtained at a few feet below the surface. Every quarter-section is good.—*J. Doupe*, 1883.

- 41. Outlines.**—West, rolling prairie, with occasional bluffs of poplar. Soil, sandy loam. Battleford and Carlton trail crosses Sections 31 and 30, and another trail Section 7.—*F. L. Foster*, 1884.

East, rolling prairie. Soil is sandy loam. Poplar and willow scrub.—*W. C. Eaton*, 1883.

South boundary, along the surface, is level prairie very flat and dry. Sandy soil; class 3. Bluffs of poplar scattered about on the westerly half, particularly in Sections 5 and 6.—*G. B. Abrey*, 1882.

Sub-division.—Is rolling prairie. The soil is a good sandy loam, on a sandy clay subsoil. The north-east and south-west parts are wooded with poplar, varying from 1 to 9 inches in diameter. There is a good supply of surface water. The township will rate a good second class. A trail crosses from Section 7 to Section 33, and the Battleford and Carlton trail Sections 30 and 31.—*F. Vincent*, 1884.

- 42. Outlines.**—Prairie, with poplar and willow bluffs. Timber from 1 to 6 inches in diameter. Soil, sandy loam. Cart trail from Battleford to Stobart crosses the line in Section 13. In Section 25 the line is again crossed by a trail.—*W. C. Eaton*, 1883.

Rolling and bushy prairie, with bluffs of poplar. Soil, sandy loam. Battleford and Carlton cart trail crosses in Section 6, and trail from Battleford to Stobart crosses in 3.—*F. Vincent*, 1884.

Sub-division.—Is, for the most part, a good agricultural tract. Soil, sandy loam, of from 5 to 10 inches deep, with a subsoil of clay, sand, gravel and clay loam. Poplar bluffs of considerable extent, and of a size 2 to 5 inches, suitable for fuel and fencing purposes, grow in the southerly and westerly parts. Surface water is comparatively scarce, though a few sloughs and muskegs of small area are to be found. Two trails, one from Battleford to Stobart, or the Duck Lake Settlement, and the other from Battleford to Carlton, pass through the township. The valley of the Saskatchewan River, which runs through the north-west portion, contains good and valuable poplar and balm of Gilead timber, from 3 to 24 inches in diameter, and well adapted for fencing and building purposes, the greater quantity being on the east side. The flats are covered with a dense undergrowth of red and white willow, cherry, alder, cranberry, &c., &c., and the soil is a deep, rich, black loam, with a subsoil of sand and clay. There are no cut banks or exposure of rocks *in situ*, the upper banks having an easy descent to the flats below, and the boulders of granite, limestone and gneiss comprise the only minerals exposed.—*F. L. Foster*, 1884.

- 43. Outlines.**—Rolling prairie, with a few poplar and willow bluffs. Soil is a sandy loam. Battleford and Carlton cart trail crosses the line in Section 1. The line crosses a creek in Section 12 and another in Section 25. The North Saskatchewan River, about half a mile wide, was also crossed in Section 25.—*W. C. Eaton*, 1883.

Sub-division.—Is gently undulating in the north-westerly part, and broken and hilly in the south-eastern part, which is traversed by the Saskatchewan River. It is, for the most part, fair arable land. Soil, good sandy loam, of fair quality and depth, over a subsoil of clay. Bluffs are scattered, but numerous, containing poplar of from 2 to 6 inches diameter, and suitable for fuel and fencing. Patches of wolf, grey and white willow, are met with, and afford a cover for an abundance of game. Poplar and balm of Gilead reach their greatest size, 2 feet and over, in the valley of the river and on the islands. The valley of the stream which flows through the upper part of the south half of the township is also thickly timbered, in places, with poplar. The water is strongly alkaline, but is drinkable. Boulders of granite, gneiss, limestone, &c., are numerous on the upper banks of the Saskatchewan and on the edge of the river. The position and slope of the numerous shoals and sand bars is constantly being changed by the flowing water, and the strong winds which frequently blow up or down the river. South-east of the river it is gently undulating open prairie. Battleford and Carlton cart trail crosses Section 1. A creek was crossed in Section 3.—*F. L. Foster*, 1884.

44. *Outlines.*—North, the soil is generally of a high average, consisting of an excellent sandy loam, with clay subsoil. Sufficient poplar for building, fencing and fuel purposes was found; also good water. An alkaline lake on Section 30, and swampy on Sections 31 and 32.—*W. A. Ashe*, 1883.

Along the south boundary the surface is undulating prairie, with bluffs of small poplar and willows, swampy in places (June) and having occasional small sloughs. The soil is a sandy loam, of about 10 inches deep, on a clay subsoil, and class 1.—*F. L. Foster*, 1884.

East, good hay land, with poplar and spruce scrub. Several sloughs were crossed by the line.—*W. C. Eaton*, 1883.

South, gently-undulating prairie, with thinly scattered bluffs of poplar and willow. A couple of clear-water ponds were crossed by the line.—*F. L. Foster*, 1884.

Sub-division.—Is gently-rolling, bushy prairie, with large alkaline flats and depressions, in which, though the water disappears, there is very little vegetation. The soil in Sections 5, 6, 8, 9, 17, 16, 21, 27, 28, 33 and 34 is very fair, and vegetation is good. The land in Sections 32, 30, 19 and 18, through which flows southerly an alkaline creek, is flat and swampy, and very much impregnated with alkali. The trail to Carlton crosses this creek on solid footing. This township may be ranked as second class.—*H. W. Selby*, 1884.

Examination.—Throughout, the surface is undulating; soil, clay loam; many ponds of fresh water; some bluffs; good for settlement.—*R. W. Hermon*, 1884.

45. *Outlines.*—South, the soil is an excellent sandy loam, with clay subsoil. Poplar for building, fencing and fuel purposes. Section

1 contains an alkaline pond and 5 an alkaline marsh.—*W. A. Ashe*, 1883.

East, an old cart trail crosses Section 1. The greater part of this line is scrubby, but solid bluffs were seen in Section 1 and the northern part of Section 36. Swamps on Sections 12 and 13.—*F. Murphy*, 1884.

Sub-division.—The east half is composed of gently-rolling prairie, with a good producing soil, as is shown by the luxuriant vegetation. The west half is traversed by an alkaline creek, running through a marsh, with several large alkaline lakes and ponds; the adjacent lands being full of alkali, make it at present unfit for agricultural purposes. There is quite a rank growth of vegetation on the flat alkaline lands adjacent to the lakes and marshes, but it is not healthy looking. Good water sloughs are scarce. A good ford over the creek, on the old cart trail, was found on Section 5. Ashe Lake, on Sections 18 and 19, is alkaline, and another lake, as large, is on Sections 32 and 33.—*H. W. Selby*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE VII.

7. *Outlines.*—This township is rolling very heavily, with sand hills in the north-eastern portion. The soil is a sandy loam, with a clay and a sand subsoil. Classes 2 and 3. A creek was crossed in Section 6 and a cart trail in Section 31.—*A. O. Wheeler*, 1883.
8. *Outlines.*—The larger portion of this township is composed of a wide valley, through the centre of which flows a tributary of the south branch of Old Wives' Creek. The northern portion consists of heavily rolling prairie. Sand hills, from 80 to 100 feet high are to be found in the south-eastern corner of the township. Soil, generally, sandy loam with clay subsoil. Averages class 2, though some parts are stony.—*A. O. Wheeler*, 1883.
North, rolling prairie. Section 35 is a hard-baked, white clay, flat. In Section 31 a small creek, flowing south, was crossed.—*T. Fawcett*, 1882.
9. *Outlines.*—The southern boundary passes along the northern bank of the wide depression through which the branch of Old Wives' Creek runs. Numerous hills and dry watercourses are crossed. The soil is mostly a rich clay loam, with clay subsoil, while on the ridges boulders and stones are found in abundance. Water was scarce, and the grass had been burnt by the middle of summer.—*T. Fawcett*, 1882.
The eastern boundary lies over gently-rolling prairie, with numerous ponds and marshes, containing fresh water. Section 12 is all water. The soil is a hard clay. The west is hilly prairie. There are two lakes of considerable size, which are situate in the north-west quarter. The soil west is a clay loam and gravel.—*A. F. Cotton*, 1883.
10. *Outlines.*—The western sections are rolling prairie, with a ridge of low hills running through them. In Section 29 is a large fresh water marsh. The soil, generally, is a fair clay loam, but the hill tops are very gravelly. The east is rolling prairie, with a few fresh water marshes and ponds. The soil is hard clay.—*A. F. Cotton*, 1883.
11. *Outlines.*—The west is gently-rolling prairie. Old Wives' Creek runs through this township, but lies only in pools after the spring flood. The soil is a fair clay loam. The east is rolling prairie. Soil, a clay loam.—*A. F. Cotton*, 1883.
12. *Outlines.*—West, rolling prairie. Soil, clay loam, 6 inches deep, clay subsoil. Class 3. A cart trail crosses the line in Section 6. Very little water along this line. Eastwards, gently-rolling prairie. Old Wives' Creek runs through this township, but is only a succession of pools, with a soft mud bottom. The soil is a clay loam.—*A. F. Cotton*, 1883.

The northern portion is very hilly, and has a gravelly clay soil, which, under proper cultivation, produces well.—*J. G. Sing*, 1882.

The north part of the township is somewhat hilly and broken by ridges; soil varies from sandy to clay loam, generally on a clay subsoil. Water mostly alkaline.—*W. T. Thompson*, 1882.

- 13. Outlines.**—The country southwards is hilly and broken by ridges; soil, sandy to clay loam, on a clay subsoil. Water mostly alkaline.—*W. T. Thompson*, 1882.

The east is class 2; subsoil, sandy loam and clay. There is a large alkali slough in Section 1. Westwards it is dry and arid, with surface boulders in places. Subsoil, clay, gravel and sand; ranks third and fourth class. Old Wives' Creek crosses the township from Section 19, flowing east. The south portion is very hilly along the 4th Base, and for about two miles north. The soil in these hills is a gravelly clay and, if properly cultivated, will produce good crops. The water tasted slightly alkaline. The northern part of this township is good clay soil. Surface, undulating prairie, and dry.—*J. G. Sing*, 1882.

Sub-division—Rolling and undulating; soil varies from light clay to sandy loam; classes 2 and 3. The north branch of Old Wives' Creek enters the township on Section 19, and crosses to the east; it dries up towards the close of the summer, so as to cease flowing, but there is fresh water to be had in the pools left by the creek.—*W. Chipman*, 1883.

- 14. Outlines.**—The north is class 2. Sections 32 and 33 contain a large marsh, extending about half a mile north of the north boundary and two or three south. In the south the soil is clay. Classes 2 and 3. No water, and dry-rolling prairie. Level prairie country eastwards, suitable for the cultivation of wheat. The subsoil is clay loam, with gravel in places. Sections 6, 7, 18, 19 and 30 are class 2; Section 31 is 3rd and 4th. Subsoil in Section 31 is stony clay, while that in other sections is clay. Surface stones were found in Section 18. No water was seen along the west boundary of these sections.—*J. G. Sing*, 1882.

Sub-division.—Undulating prairie, without wood. Soil, a good clay loam, class 2. A large fresh water marsh of 2,000 acres covers the greater portion of Sections 28, 29, 32 and 33, from whence large and luxurious crops of hay might be taken. There are also a number of muskegs throughout the township containing fresh water.—*W. Chipman*, 1883.

- 15. Outlines.**—There is a large lake covering the east half of Section 13. Along the east, south of this lake, the surface is dry and gently-rolling. To the north of the lake it is hilly, with small marshes in the depressions.—*A. C. Talbot*, 1883.

Outlines.—The western portion, surface slightly undulating, and very dry and hard. Section 7 is gravelly and stony. Along the line the land is class 2; the subsoil is clay. The northern part is broken by a range of gravelly hills, extending about two miles to the south of the northern boundary. The southern part

is much better land, and comparatively level. On the south boundary is an immense swamp or marsh, covering an area of four miles on each side of the line. There are some excellent grass lands in this township.—*J. G. Sing*, 1882.

Sub-division.—Rolling and level prairie. Soil, sandy loam on sandy subsoil; classes 1 and 2. May be called good grazing, with much good farming land intermingled. No wood. Some large hay marshes and other smaller ones occur in the township.—*P. C. Talbot*, 1883.

16. *Outlines.*—Composed of some very good farming land; a portion of this township, I ranked in my field notes as 3rd class on account of the soil being very gravelly and stony, and producing a very poor growth of grass. The surface was also very knolly and broken, particularly along the southern boundary.—*J. G. Sing*, 1882.

The surface along the eastern boundary is inclined to be hilly with many small marshes among the hills. The soil is very fair.—*A. C. Talbot*, 1883.

The northern portion is a succession of low ridges and fresh water ponds and marshes. The soil is a rich clay loam, with excellent grasses. A cluster of very high buttes was met with in Section 36.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie; soil, sandy loam, of a light depth, on a sandy subsoil, with some portions gravelly loam; generally poor soil. An alkaline lake occurs on Sections 31 and 32. No wood.—*H. H. Robertson*, 1883.

17. *Outlines.*—Very hilly. The soil is very varied, many places being very gravelly and stony and some sandy; other portions are clay loam. Water is plentiful in sloughs and small lakes. In many of the lakes the water is not good. The vegetation in this township, though hilly and in many places rough, is high and luxuriant, and will afford good pasture for cattle and horses. No timber whatever was seen in this township.—*L. Bolton*, 1882.

East, rather hilly. The line crosses the Qu'Appelle trail in Section 36. A few sloughs and clear water ponds were crossed. The southern sections contain a succession of low ridges, fresh water ponds and marshes. The soil is a rich clay loam, with excellent grasses. There is a cluster of very high buttes in Section 1.—*T. Fawcett*, 1882.

Sub-division.—High, rolling prairie, being situate in the "Coteau du Missouri," with numerous marshes and sloughs. Soil, sandy; class 3; good for grazing. Water generally fresh. No timber. The C. P. R. passes through the township, and has the station of Ernfold in the north-east corner.—*G. C. Rainboth*, 1883.

18. *Outlines.*—West, east and south, very hilly, being part of the Grand Coteau. The soil is, in places, very gravelly and stony, and in other places sandy. Other portions are a clay loam, with a clay subsoil. Water is plentiful in sloughs and small lakes, in many of which the water is impregnated with different kinds of salts. Numbers of fresh springs run out of the larger hills. The

vegetation is high and luxuriant, and excellent for pasturage. No timber.—*L. Bolton*, 1882.

North, very rough and broken, with the exception of Sections 35 and 36, which are rolling. Soil is sandy loam, with a sand subsoil. Class 3. Grassy swamps and ponds are numerous.—*H. B. Proudfoot*, 1882.

Sub-division.—Rough, hilly and broken, with numerous ponds, marshes and a few lakes. Soil classes 2 and 3, being mostly sandy loam, on sandy and gravelly subsoil. Pasturage is generally rich. This township is situate in the "Coteau du Mis-souri."—*G. C. Rainboth*, 1883.

19. *Outlines*.—Nearly all very rough and hilly. The surface throughout is covered by innumerable small hills, grass swamps and ponds, which will render it unfit for all agricultural purposes, except grazing, there being a most luxuriant growth of grass. The soil is very changeable, a sandy loam with sandy subsoil predominating. The tops of many of the sand hills are very gravelly, with some large stones.—*H. B. Proudfoot*, 1883.

West, rolling and hilly prairie. Soil, clay and sandy loam, with gravel subsoil. Class 2. Numerous lakes and sloughs were crossed by this line.—*L. Bolton*, 1882.

Sub-division.—Is a hilly and rolling prairie, with numerous grassy sloughs containing good water. This township affords rich pasturage; but would also make fair farming land. Soil, sandy loam and sandy subsoil; generally class 2.—*E. J. Rainboth*, 1883.

20. *Outlines*.—The south-east portion is very rough and hilly. The surface throughout is crossed by innumerable small hills, grass swamps and ponds, which will render it unfit for all agricultural purposes except grazing, there being a most luxuriant growth of grass. The soil is very changeable, a sandy loam with sandy subsoil predominating. The tops of many of the sand hills are very gravelly, with some large stones; alluvial soil, sandy loam, from 3 to 8 inches, with sandy subsoil. Class 3.—*H. B. Proudfoot*, 1882.

The north is much broken by ravines, which cross the line and run into the valley of the River Saskatchewan. Prince Albert trail crosses Section 32.—*E. Bray*, 1882.

West, hilly prairie, with numerous sloughs. Soil, clay, with gravel subsoil. Class 2. In Section 30 are the Vermillion Hills. A cart trail crosses the line in this section.—*L. Bolton*, 1882.

Sub-division.—Rough and hilly prairie, broken by numerous coulees in the north, in some of which is to be found scrub poplar and ash, good for fuel only. Good fresh water sloughs are exceedingly numerous. The tops of the knolls are generally stony and gravelly. Soil, sandy loam. Class 2. Generally better suited for pasturage. The Prince Albert and Swift Current trail crosses the township.—*E. J. Rainboth*, 1883.

21. *Outlines*.—Section 31 is knolly and hilly, with a large quantity of poplar wood scattered over it. Fourth class. Sections 32 to 36

are rolling to knolly prairie, with light sandy soil, and third class generally. On Section 33, lies a saline lake, about one and a half miles in length by half mile in width.—*F. W. Wilkins*, 1883.

Rolling country, with heavy, dry clay soil. The South Saskatchewan flows along the western boundary for nearly two miles passing through Sections 19 and 30. The soil along the river is very light and sandy. Small groves of, principally, cottonwood, suitable for fuel or fencing, are found along the banks. The river is about 40 chains in width and, with the exception of the main channel, which is between 150 and 200 feet wide, is filled with sand bars. The water is very muddy. The south boundary lies at the base of the Eyebrow Hills. North of the river is undulating, with willow, poplar and cherry scrub, also some ash. Soil is sandy. Class 3. East, dry, rolling prairie. Soil is heavy clay, with clay subsoil. Class 2. Cart trail crosses the line in Section 13.—*T. R. Hewson*, 1882.

The southern portion is much broken by ravines, which cross the line, and run into the valley of the River Saskatchewan.—*E. Bray*, 1882.

Sub-division.—Is a rolling and undulating prairie, with a second class soil of sandy loam, and sandy subsoil. The Saskatchewan River courses through Sections 18, 19, 30 and 31. There are a few bluffs of poplar of small dimensions on Sections 32 and 33. This township is good for grazing, and some parts will make fair farming land.—*F. E. Brunelle*, 1883.

22. Outlines.—Section 6 is class 4, and hilly, with a large quantity of wood (poplar) scattered over it. The other northern sections are rolling to knolly prairie, with a light, sandy soil, which is third class. On Section 4 is found a saline lake, about one and a-half miles in length by one-half mile in width.—*F. W. Wilkins*, 1883.

East, rolling prairie, rather dry. Soil, heavy clay, with clay subsoil; class 2. Cart trail crosses Section 25. West, rolling country, with deep ravines. The Saskatchewan River crosses in Sections 13, 24 and 25. Ash, poplar and willow were found near the river. South of the river, a short distance, a large marsh was crossed. Soil is sand loam, from 8 to 30 inches, with clay subsoil. Classes 1 and 3.—*T. R. Hewson*, 1882.

In the northern portion the surface is much cut up by deep coulées, with wood in most of them. These coulées run to the Saskatchewan valley. The river crosses in Section 33, the bed being nearly a mile wide, with the usual sand bars and shallow water, except in the channel, where it is over 7 feet deep. A moderate quantity of wood can be obtained here, principally poplar, elm, cottonwood, maple, ash and cherry, the largest of the cottonwood being 24 inches in diameter. The soil along the line is a light, sandy loam, and 3rd class.—*J. F. Garden*, 1882.

Sub-division.—Undulating and rolling prairie. Its soil is sand and clay, of a second class, and some of it may make good grazing land. The Saskatchewan River enters on Sections 5 and 6 and leaves by Sections 32, 33 and 34, having a varying width of from 20 to 45 chains, and very hilly and scrubby banks, having

bluffs of poplar and willow, and, in some instances, ash. There are some sand hills on Sections 19, 20, 28 and 29.—*F. E. Brunelle*, 1883.

- 23. Outlines.**—The land along the north boundary follows a coulée, containing permanent water, to the Saskatchewan River. A fair quantity of maple, poplar, ash and cherry—some of the maple measuring 10 inches in diameter—was found in it. The land adjoining this coulée is a dry, rolling prairie, with light loam soil. 2nd class. In Sections 34 and 35 the river is crossed, the valley containing some timber of the above mentioned varieties. The bed of the stream is about half a mile wide, and has numerous shifting sand bars. East of the river the land is even, dry prairie with sandy 3rd class soil. There are many deep coulées running through the southern sections and emptying into the Saskatchewan River valley. The river passes north through Section 4 with the features which have been described in Township 22. The soil here is light and sandy, and will not rank above 3rd class. Along the eastern boundary, Section 1 has a very good clay loam soil; in Section 12 there is a large slough, and north of this section the surface is a dry, open prairie, with a 2nd class soil. The west is undulating, dry prairie, with hard clay soil. Some permanent water is found in sloughs.—*J. F. Garden*, 1882.

Sub-division.—The South Saskatchewan River divides this township north and south; current, 3 miles; width, 22 to 56 chains; banks fringed with poplar and scrub; and on the left bank, on Section 4, there is a belt of timber, consisting of elm, soft maple, balm of Gilead and poplar. The country on both sides of the river is a high, dry prairie, without one marsh or lake. Soil, generally, a sandy loam on sandy subsoil.—*J. Burke*, 1883.

- 24. Outlines.**—The country on the east, as far south as the Saskatchewan, is an open, sandy plain, with a good growth of grass, and class 3. The river crosses Section 12, the bed being about three-fourths of a mile broad, and having numerous sandbars. Poplar and native maple, some of it 14 inches in diameter, grow on the edge of the valley. The ascent out from the river valley is moderately steep, the side hills being sand and nearly bare of vegetation. A little west of the line, and north of the river, a good stream of fresh water, in a coulée from 100 to 150 feet deep, runs into the river, has a permanent flow and could be utilized as a small water power. A good quantity of wood was also found. The west is rolling, open prairie, with a good first-class clay or clay loam, and in some places, hummocky clay soil. Some of the ridges show a little gravel. There is a coulée which follows along the south of the southern six sections, and contains a stream running to the river. This coulée and its vicinity is described in Township 23. Section 1, east of the river, is dry and sandy, and class 3. West of the river the surface is somewhat better, and may be rated as class 2.—*J. F. Garden*, 1882.

The north-east part of this township is inclined to be sandy soil, but the west half is first-class quality.—*T. Kains*, 1882.

Sub-division.—The South Saskatchewan River passes through the south-east corner; width, from 35 to 70 chains; current, 3 miles; banks bare of timber, except a few bunches of poplar and willow on the left bank. The soil near the river is sandy, but in the north-eastern part of the township, the soil is heavier and more fit for agricultural purposes.—*J. Burke*, 1883.

- 25** *Outlines.*—As it appeared from the southern boundary, Sections 1, 2 and 3 were of a light soil, but the westerly sections were very much better.—*T. Kains*, 1882.

Sub-division.—The surface is chiefly undulating prairie and has a good many sloughs, of which a very large one occurs on the north-western portion of Section 33. The soil is generally a sandy loam on a clay subsoil, and class 1. There is no timber in the township.—*J. Burke*, 1883.

- 26** *Outlines.*—Along the west and east, it is rolling prairie. Soil, a light sandy loam, from 4 to 6 inches deep, with a sand subsoil; classes 2 and 3. In Section 30 Red Deer Creek flows eastwards in the bottom of a valley some 300 feet deep, with bush on the south side of the ravines. The water in the creek is alkaline. Eastwards; in Sections 12 and 13 small creeks of good spring water flow eastwards towards the Saskatchewan River, which crosses Sections 13, 24, 25 and 36, some distance west of the line. Ravines from 75 to 100 feet deep, containing poplar, 3 to 12 inches in diameter, also black ash and red willow.—*J. A. Maddock*, 1883.

Sub-division.—The Saskatchewan River runs across the north-east corner; width, 23 to 35 chains; current, 3 miles. Red Deer Creek enters on Section 30, and leaves on Section 35, is alkaline, and fringed with willows and scattered poplars, and near its mouth with poplar bluffs and some soft maple, only suitable for fuel. Soil, principally a light sandy loam, rather light for farming, as surface water is very scarce back from the river, except in Sections 4 and 5. The valley of Red Deer Creek crosses Sections 30, 29, 28, 34 and 35, and is from one-half to one mile broad, and very deep.—*J. Burke*, 1883.

- 27.** *Outlines.*—Undulating prairie. Sandy soil. Red Deer Creek was crossed in Section 2, and the South Saskatchewan River in Section 1.—*J. Burke*, 1883.

Is heavily rolling prairie to the north-east, and slopes gently to the Saskatchewan River, which crosses it diagonally from south-east to north-west. The portion south-west of the river is honey-combed with numerous deep ravines. The river averages from about 35 to 40 chains in width, and there is a good supply of wood, chiefly poplar and ash, the former up to 10 inches diameter. The western bank is the best wooded. Soil, a sandy loam, very light near the river. Rolling prairie eastwards. Soil, sandy loam about 6 inches deep, with a sand subsoil; class 2. Section 12 is broken prairie, dotted with young poplar. In Section 1 two ravines, with small poplar and willow bush, were crossed. A creek from 2 to 6 feet wide flows westward through the most northerly of the ravines. In Section 31 a creek, 1 to 3 feet deep, and 1 chain wide, runs into the river, which breaks up this section

and also 19 and 30. The soil in these three sections is sand, and 3rd class. Sections 18, 7 and 6 are level prairie, sandy soil and subsoil; class 3.—*J. A. Maddock, 1883.*

Sub-division.—High, rolling prairie, broken by the Saskatchewan River, which runs northward, with a current of 4 miles, from south-east to north-west. The river has banks about 250 feet high, covered with scrub and poplar, the latter from 3 to 6 inches in diameter. Many sand bars occur in the river, and in some places the banks are pure sand. Several creeks enter the river on the north-east. The soil, generally, is a sandy loam, class 2, and not the best suited for farming. North-east of the river the surface is mainly high rolling, but is hilly in the south corner. Any growth of wood that is on the prairie back from the river, is on Sections 12, 32 and 33, and in a ravine running through Section 28. South of the river the surface is more undulating and the soil on both sides of the river consists of a sandy loam, about 10 inches deep, on a sandy subsoil, and is classes 2 and 3.—*M. J. Charbonneau, 1883.*

- 28.** *Outlines.*—High rolling prairie, somewhat knolly in places, with a few grass swamps, generally of small area, containing good fresh water. Soil is generally first-class, being a good clay loam with clay for subsoil.—*T. Kains, 1882.*

The south-west slopes gently to the Saskatchewan, which flows for $2\frac{1}{2}$ miles along the western boundary. Soil, a good sandy loam with sand subsoil, which becomes very light on approaching the river. Westwards and eastwards, rolling prairie. Soil, sandy loam, about 6 inches deep, with a clay and sand subsoil; classes 2 and 3. A few sloughs were crossed. Sections 31, 30 and 19 are level. The Saskatchewan River strikes the west line about the centre of Section 18, then turning, it follows the line across Sections 7 and 6. The banks are from 100 to 200 feet high, the current is about 4 miles an hour.—*J. A. Maddock, 1883.*

Sub-division.—Rolling prairie, broken in the south-west corner by the Saskatchewan River. Soil, rich sandy loam on clay subsoil, and class 1. Suitable for farming. The Saskatchewan River and banks possess exactly similar features as described in Township 27. The mail carrier's trail crosses the township diagonally. The south is high rolling prairie, with willow brush in places. Soil, sandy loam, from 7 to 10 inches deep, on a sand subsoil; classes 2 and 3. The east half of Section 6 is hilly.—*M. J. Charbonneau, 1883.*

- 29** *Outlines.*—The north-east is level prairie. Soil, sandy loam, from 6 to 9 inches deep, with clay subsoil; class 2. Section 36 is slightly alkaline. Very little surface water. The south-east is heavily-rolling. Soil, a sandy loam, with clay subsoil to the east, and a sandy subsoil to the west. Fresh water abundant. West, level prairie. Light sandy loam soil, about 6 inches deep, with sand subsoil; class 3. Water in sloughs and marshes.—*J. A. Maddock, 1883.*

The south is high, rolling prairie, somewhat knolly in places, with a few grass swamps, generally of small area, containing good

fresh water. Soil, is generally first-class, being a good sandy loam, 3 to 6 inches deep, with clay subsoil.—*T. Kains*, 1882.

- 30. Outlines.**—The east is rolling and level prairie. Soil is a sandy loam, about 6 inches deep, with a clay subsoil; class 3. Section 1 is slightly alkaline. The north of Section 12, all of 13 and 14 is covered by a large marsh, $2\frac{1}{4}$ miles wide. The west is rolling prairie, with scrub in places. Soil is a light sandy loam, about 6 inches deep, with sand subsoil; class 3. Sections 6, 7 and 18 are scrubby. Water is scarce.—*J. A. Maddock*, 1883.
- 31. Outlines.**—The eastern part is open rolling prairie, with some low hay land in Section 13, and some very light sandy land in Sections 13 and 36; 4th class. Sections 1, 12, 24 and 25 are second class, having a fair sandy loam soil. The South Saskatchewan River crosses Sections 25 and 36, is about a quarter of a mile in width, with a swift current and stony banks. The bed of the stream is a good deal obstructed by sand bars, and is depressed below prairie level about 100 feet. The banks of the river are steep on both sides and have some pretty good wood along them, more especially so on the southern side. The western part is rolling and hilly country. Section 6 is entirely taken up by the South Saskatchewan River. Sections 7 and 18 are in rolling prairie, third class. Sections 19, 30 and 31 have light sandy soil, and have also a good deal of small wood and brush growing on them; fourth class. The bed of the South Saskatchewan River, which is crossed in Section 6, is depressed about 125 feet below prairie level, and is very much obstructed by sand bars. The banks are steep on both sides, and are fringed with some nice wood, ash maple and poplar. North; rolling prairie. Soil is sand loam; classes 3 and 4. In the east half of Section 33 is a large saline lake, west of which are sandy knolls. The line is crossed in Sections 36 and 33 by cart trails. Section 31, is knolly with scattered clumps of poplar and willows.—*F. W. Wilkins*, 1883.
- 32. Outlines.**—Along the eastern sections, open rolling prairie, with rather light sandy soil, generally third class. The west is hilly country, with light sandy soil and a good deal of poplar on Sections 6, 18 and 19; fourth class. South, rolling prairie. Soil is sandy loam, classes 3 and 4. In the east half of Section 4 is a large saline lake, west of which are sandy knolls. The line is crossed in Sections 1 and 4 by cart trails. Section 6 is knolly with scattered clumps of poplar and willows.—*F. W. Wilkins*, 1883.
- The north-easterly half is poor, being sand ridges, mostly covered with poplar and willow. The westerly half is rolling prairie, of fair quality.—*E. Bray*, 1883.
- 33. Outlines.**—Sections 31, 32 and 33 are in low, flat country, with a little small wood in clumps. This would make good hay land. The balance of the north line is in knolly to hilly country, with a good deal of small wood, and with very light, sandy soil; fourth class throughout. The west is open, gently-rolling prairie, with light sandy soil, which is third and fourth class. Section 6 is knolly. In Section 31, a saline pond was crossed. The east is 2

knolly country, with very light sandy soil, and fourth class. A good deal of poplar and willow, generally of small size, was found along this line.—*F. W. Wilkins*, 1883.

The south-easterly half is poor, being sand ridges, mostly covered with poplar and willow. The westerly half is rolling prairie, of fair quality.—*E. Bray*, 1883.

Sub-division.—Surface is level and rolling prairie, varied in places by sand hills which are generally covered with a dense growth of scrub. The soil is exceedingly light, and good water is scarce. In some sections there is a fair growth of small poplar in clumps. This timber would ultimately become of value if it were not for the prevalence of prairie fires. The general surface is rolling prairie, especially to the south and east. There are poplar woods in the south-east, in Sections 1, 2 and 3, and scattered islands of poplar all along the eastern boundary and the eastern half of the northern boundary. The north-west quarter of the township contains numbers of marshes and several lakes; this portion is a low flat country, having good hay lands. The north-east quarter is scrubby and has many sandy knolls and scattered clumps of wood.—*C. E. Towle*, 1884.

34. *Outlines.*—East, entirely in sand hills, with clumps of poplar in the valleys between the hills. Some of this timber is of good size; fourth class soil. The west is hilly country, with numerous springy places and small marshes, a light sandy soil, and having a good deal of small wood, fourth class soil. The southerly Sections 1, 2 and 3 are knolly country, with scattered clumps of small poplars and willows. Soil, loam, sand subsoil, yellow sand; class 4. Sections 4, 5 and 6 are low and flat, being good hay lands; soil and subsoil the same as in Sections 1, 2 and 3; class 4.—*F. W. Wilkins*, 1883.

Sub-division.—The east, west and south portions, consist of rough rolling sand hills, which are covered with thick willows and patches of young poplar. The north central portion is rolling prairie, with a good soil of sandy loam. In the centre it is low, wet and alkaline. The south-west is low and flat, with poplar and willow brush, and is good hay land. The south-east quarter contains sand hills, with bunches of poplar and willow brush. There is some large poplar in Sections 24 and 25. Hay marshes are abundant and water is plentiful, but is more or less alkaline.—*F. Purvis*, 1884.

35. *Outlines.*—The east portion is knolly and hilly, with light sandy soil; fourth class. There is a good deal of poplar and willow wood along the eastern boundary. Western sections are rolling. Section 6 is almost entirely covered with a thick growth of young poplars. The large timber (all dead and lying down) appears to have been killed by fire. The soil on Section 1 is light and sandy, and is rated fourth class. The remaining sections are mostly first class, with dark clay and sandy loam soils.—*F. W. Wilkins*, 1883.

Sub-division.—The eastern portion—about one-third of the whole—is very much broken by small sand hills, covered with a

dense growth of young poplar. The remainder of the township is undulating prairie and well adapted for settlement, the soil being a good sandy loam on a clay subsoil. Hay marshes are numerous, but good water can be only obtained by digging. Fuel will be plentiful in a few years.—*F. Purvis*, 1884.

- 36. Outlines.**—The eastern sections are gently rolling and open prairie. Section 1, and the south half of Section 12, are springy and boggy; fourth class. The balance of the east line is first class, with good black sandy loam soil. A small creek crosses Section 12; course, south-east. The west is mostly open open rolling prairie. Sections 6 and 7 have dark clay loam soil, first class. The soil, over the balance of this line, is rather light and sandy, and third class. A long and narrow alkaline lake crosses Section 30. Sections 7 and 18 are knolly.—*F. W. Wilkins*, 1883.

Northwards, the soil is almost pure sand. Water is pure and fresh. A good deal of green and 6-inch dead poplar is standing, and much underbrush, with a belt of poplar about three miles north.—*W. A. Ashe*, 1882.

Sub-division.—Gently-rolling and open prairie, excepting a few scattered clumps of young poplar and willow in the north. There are numbers of small lakes, ponds and marshes, the larger ones of which, are generally alkaline, although one long fresh marsh extends through Sections 2, 11 and 14. This township is well adapted for settlement, as the soil—excepting the northern tier of sections—is good second class throughout.—*F. Purvis*, 1884.

- 37. Outlines.**—The sections along the southern boundary appeared to possess a soil of a very sandy nature, covered with a heavy growth of underbrush, and some green and dead poplar. About three miles to the north, there could be seen a belt of large poplar apparently about 8 to 10 inches in diameter. There is a marsh on Section 4, otherwise there is not much water.—*W. A. Ashe*, 1882.

Centrally; scattered bluffs of poplar, and clumps of willows. Poplar windfalls with dense growth of underbrush; class 2.—*J. S. Dennis, Jun.*, 1878.

The soil of the eastern part of the township is first class, while the western part is rated second class. Ridges of a sandy nature cross the township in a south-westerly direction, which portion is rated third class. The surface of the north-eastern part of the township is level. The south-western part is hilly, and timbered with clumps of poplar and whitewood, suitable for building purposes, fencing or fuel.—*A. G. Cavana*, 1883.

Sub-division.—Rolling, bushy land, with numerous dense bluffs of small poplar and willows, especially in the westerly three-fifths, where the soil is a sandy loam and rates class 2. In the easterly two-fifths, the soil is a rich sandy loam, class 1. Some of the poplar measures a foot in diameter; but much of the wood has recently been swept by fire. Water in the sloughs is generally alkaline. Much of the land is good farming land. The north is level and rolling prairie, dotted over with poplar and willow bush. Soil, clay and sandy loam, from 5 to 15 inches deep, with clay and sandy subsoil; class 1.—*J. Doupe*, 1883.

38. Outlines.—The eastern part of this township is level, and the western part rolling. There are numerous sloughs, bordered with small poplar and willow. Soil, first and second class. The old telegraph line crosses the northern tier of sections.—*A. G. Cavana*, 1883.

Sub-division.—Gently, rolling prairie, with a great quantity of brush and many bluffs of small poplars and willows. The soil is chiefly a clay loam; but there are many patches of sandy loam. Most of the swamps dry in early summer, and their water generally is good. Water can be found any-where by digging. This is a good township for farming purposes. Along the south and north boundary lines it is level and rolling prairie, dotted over with poplar and willow brush. Soil, clay and sandy loam, from 5 to 15 inches deep, with clay and sandy subsoil. Class 1. Several marshes were crossed on both lines, but water is not plentiful on either.—*J. Doupe*, 1883.

39. Outlines.—This township, throughout, is level and wet, with soil generally of a first class character. The Saskatchewan River crosses the north-west corner, and its banks are heavily wooded.—*A. G. Cavana*, 1883.

Sub-division.—Chiefly a gently rolling brushy prairie, dotted with small bluffs of poplar. The North Branch of the Saskatchewan enters on Section 30 and leaves on Section 32, current 3 miles, and has broken and rough banks, 200 to 250 feet high, with poplar and dense willows, particularly on the south bank. Some of the ravines contain poplar of 10 to 15 inches, suitable for lumbering and building purposes, and in many streams of clear spring water flow to the river. The soil is a clay loam, with heavy clay subsoil, except in the south-west quarter, which is sandy loam, but very rich. Towards the river the soil is clay and stony, with some boulders. This is a good township for farming. South, rolling prairie, with willow bluffs. Soil is sandy loam from 4 to 10 inches deep, with sandy subsoil. Class 1. Along the north boundary and east of the river it is level prairie, dotted in places with willow and small poplar. Class 1. A few marshes were crossed. The trail to Fort Carlton crosses Sections 19, 29 and 33. West of the river the country is broken and rolling.—*J. Doupe*, 1883.

40. Outlines.—Open, undulating prairie; soil, first class. The North Saskatchewan flows across the township in a north-easterly direction. This river has a belt of poplar on each side, about half a mile in width. The surrounding country is from 100 to 150 feet above the river. The timber along the banks, and in coulées, is suitable for building purposes, fencing or fuel. The bed of the river, in spring, varies from 40 to 60 chains in width. As the season advances, navigation becomes very difficult on account of sand bars, especially at the west part of the river, known as the "Elbow." The east part is brushy for the first three miles, when sloughs have to be crossed; from thence to the north the surface is open prairie. The western boundary is brushy all along the

line, with quite a number of sloughs and marshes.—*A. G. Cavana*, 1883.

The north-eastern part is dry and sandy, with bluffs of poplar scattered along the line to the valley of the river. After crossing the river, the country is dry and covered with boulders. Good birch and poplar timber grows in the valley of the river. The road to Fisher's Ferry and Stobart, which follows the east side of the river, crosses the north line between Sections 35 and 36.—*G. B. Abrey*, 1882.

Sub-division.—Is divided into two nearly equal portions by the Saskatchewan River—Section 5 to Section 34. The river has a width of 20 to 40 chains, has several islands—one of about 80 acres covered with large poplar and dense brush—and has banks 200 feet high, rather rough and stony, and broken by many ravines which contain spring water creeks and much fair-sized poplar timber. The soil is a mixture of clay and sand loam, and will make good farming land, and has a fair distribution of wood throughout. The south is level prairie, with scattered bluffs of poplar and willow; soil, class 1. Water in marshes and in the North Saskatchewan River, which crosses the line in Section 5. The trail to Fort Carlton crosses the line in Section 4. West of the river, the country becomes broken.—*J. Doupe*, 1883.

41. *Outlines*.—The eastern part of the south boundary is dry and sandy, with bluffs of poplar to valley of the river. Across the river the country is dry and covered with boulders. Good birch and poplar timber grows in the valley of the river. The southern portion of the west boundary, as far as the middle of Section 30, is exceedingly stony prairie. The balance is rolling prairie, and first-class agricultural land.—*J. K. McLean*, 1883.

Sub-division.—Is for the most part rolling and undulating prairie, with a slight rise to the west. Soil, sandy loam, of a rather light and coarse character, over clay, stone and gravel. In the bottoms of ravines and in the valley of the Saskatchewan the soil is much richer. The land is, for the most part, stony, the hills, forming the banks of the river, being particularly so. Balm of Gilead and poplar, 2 to 24 inches diameter, very useful for building, fencing and fuel, grow in the valley of the Saskatchewan. The islands are nearly all similarly wooded. The water in the lakes and ponds is good. No fish in the lakes. East of the river the country is open prairie, with a few bluffs of small poplar. The Battleford and Carlton cart trail and a branch trail skirt the east side of the river.—*F. L. Foster*, 1884.

42. *Outlines*.—The west is rolling prairie and first-class agricultural land as far north as a large salt lake in Section 7. After crossing the lake the country is generally rolling, with a rich sand loam soil, and covered with numerous bluffs of poplar, averaging about 7 inches in diameter.—*J. K. McLean*, 1883.

Sub-division.—Varies from level and gently undulating prairie to hilly timbered land. The timber is chiefly in the immediate vicinity of the lakes and the Saskatchewan River. Soil, sandy loam of good quality and depth, over a subsoil of clay. Good

fencing timber was found on the edges of the lakes, while in the valley of the Saskatchewan and on the islands in that river, timber fit for building, fencing and fuel can be obtained. Some stony land occurs in the vicinity of the lake, in Sections 7 and 18, and near the river. Very little rock *in situ* is to be seen. The water in the lakes, with the exception of that in Sections 7 and 18, is fit to drink, and is covered with great numbers of duck and plover. On the east side there is very little timber north of the river, but south of the river it is heavily wooded. The south is open prairie, with only a few poplar bluffs. There are five large lakes, which occupy a diagonal belt in a south-west and north-east direction across the township. These lakes are from 700 to 300 acres each.—*F. L. Foster, 1884.*

- 43. Sub-division.**—A good deal of light sand is to be found to the west, on the high lands. The eastern half is nearly level or gently undulating, while the western half is 150 to 200 feet higher and quite hilly. The land begins to rise about the centre and attains its greatest elevation about two miles from the west boundary; from this to the west boundary the land is half covered with poplar, 2 to 10 inches in diameter, suitable for building and fencing, and willows, also underbrush. A number of ridges and ravines run in a north and south direction. A few sloughs occur in the valleys. A few granite boulders may be seen. Soil, deep, rich, sandy loam. The eastern half is well watered by ponds, lakes and streams of good, fresh water, with but little alkaline matter. Timber is small but suitable for fencing and fuel. A few alkaline clay flats occur. The small stream running out of the lake in Sections 35 and 36 can be crossed in many places by loaded carts, and contains jack-fish. This stream empties into a lake, in Section 2, which, together with several other lakes in the east of this township form a part of the lake belt referred to in Township 42.—*F. L. Foster, 1884.*

- 44. Outlines.**—The soil along the north boundary is generally of a high average; consisting of an excellent sandy loam, with clay subsoil. Sufficient poplar for building, fencing and fuel purposes was found. Blaine Lake was crossed in Sections 3 and 4.—*W. A. Ashe, 1883.*

This township appears to possess generally an undulating surface, and is open prairie, with occasional bluffs of poplar, except in the south-west, where the surface is more broken and hilly, with a good sandy loam. Soil, class 1, of a depth of 10 inches, on clay. East and north-east, the soil is a black loam; class 1, 10 inches deep, on clay; and westwards, the soil is a light, sandy loam; class 2. Plenty of swamps and sloughs scattered about.

West, Lake Blaine was crossed in Sections 7, 8 and 21. This lake covers probably 6,000 or 7,000 acres of the north-west of this township. Some scrub and bluffs along the line. An old cart trail in Section 7 crosses the township to Section 13. High and hilly in the south-west, sloping eastwards, till it becomes level or undulating prairie. Timber on the hills is thick and of good average size. A lake in Sections 1 and 2 East, scrub. In Sec-

tion 13 the line crosses an old trail, also a creek, and in Section 24 a large marsh with clear water in the centre.—*F. L. Foster*, 1884.

Sub-division.—The easterly and south-westerly portions descend gradually from a range of hills in Sections 34, 27 and 22. The remainder descends towards Blaine Lake, a large body of alkaline water extending out of this township about a mile and a-half westerly. The south boundary of Sections 5 and 6 passes along the face of a high range of hills. Sections 1 and 12 are alkaline flats, through which an alkaline creek flows. Soil good, sandy and clay loam, and would be classed as fair No. 1, except for being so broken and impregnated with alkali. The vegetation on the high lands is fair, but on the low lands it is scanty. There is very little good water, it being more or less flavored with alkali.—*H. W. Selby*, 1884.

45. *Outlines*.—Going west along the southern boundary the surface ascends towards Section 3, then descends to Blaine Lake, which occupies Section 4. There is some brush all along the line, but west of the lake there is some good heavy poplar.—*W. A. Ashe*, 1882–83.

Sub-division.—The easterly half is gently-rolling prairie, except Sections 3 and 10, where a high ridge or range of hills forms a watershed between the east and west. These hills extend northerly through Sections 9, 16, 21, 28, 29, 30, 19, 32 and 33. The southerly sections are rolling and more heavily timbered. Ashe Lake, in the south-east, is an enlarged watercourse, with alkaline flats adjoining in many places, and on the north side thickly wooded. Windsor and Blaine Lakes are situated in the midst of large hills. Soil, very rich; sandy and clay loam on clay bottom. Vegetation is rank and luxuriant. Water in large lakes is alkaline, but in the north and centre plenty of fresh water sloughs can be found. A large marsh lies on Section 36.—*H. W. Selby*, 1884.

48. *Outlines*.—The north line is well timbered with tamarac, spruce, birch, poplar, pine and whitewood; tamarac, spruce and birch range from 3 to 14 inches diameter; pine 3 to 15 inches; poplar 3 to 9 inches. Land is rolling, though broken by several sloughs and lakes. In Section 31 a small creek crosses the line, flowing south into a lake of clear, fresh water. The alluvial soil is generally deep, from 4 to 14 inches, resting on a sand, sandy loam, clay, and, in some cases, black muck; classes 2, 3 and 4. Generally the surface is very hilly, with many lakes, sloughs, marshes and tamarac swamps. Soil improving towards western part, changing from a sand to a good clay loam, timbered with poplar, pine, tamarac and a few clumps of fine large spruce in Sections 36 and 33. Country to the west of this range becomes more open and soil of superior quality.—*A. G. Cavana*, 1882.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN

RANGE VIII.

7. *Outlines*.—Soil, generally a sandy and clay loam, rather dry, and under class 2. A creek was crossed in Section 1 and a cart trail in Section 36. A branch of Old Wives' Creek crosses the north-west, but soon dries up.—*A. O. Wheeler*, 1883.
8. *Outlines*.—Rolling prairie. Section 2 is very stony. Rather hilly in places. See also description in Township 9.—*T. Fawcett*, 1882.
Heavily-rolling prairie. A tributary of the south branch of Old Wives' Creek flows through the south-east portion of the township. Soil, sandy loam or clay loam, with chiefly clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
9. *Outlines*.—The southern boundary passes along the northern bank of the wide depression through which the branch of Old Wives' Creek runs. Numerous hills and dry watercourses were crossed. The soil is mostly a rich clay loam, with clay subsoil, while on the ridges boulders and stones were found in abundance. Water was scarce, and the grass had been burnt when crossed. The west Sections 6, 7, 18 and 31, are undulating prairie. Soil, clay loam, from 6 to 20 inches deep, with a clay and, in places, gravelly clay subsoil. Classes 1 and 2. Sections 19 and 30 are hilly and broken by ravines; stony on the hill sides; ravines from 20 to 50 feet deep.—*T. Fawcett*, 1882.
The east is hilly prairie. The soil is a clay loam and gravel.—*A. F. Cotton*, 1883.
10. *Outlines*.—The eastern sections are rolling prairie, with a ridge of low hills running through them. The soil is a fair clay loam, but the hill tops are very gravelly.—*A. F. Cotton*, 1883.
West, undulating prairie, except Section 6, which is hilly. Soil, clay loam, from 4 to 18 inches deep; clay subsoil. Class 1. In the north half of Section 31 is a large fresh-water marsh, which extends north past the section corner, 120 chains east and 30 chains west; average depth, 3 feet. Other marshes were passed on the line.—*T. Fawcett*, 1882.
11. *Outlines*.—The eastern sections are gently-rolling prairie. Old Wives' Creek runs through this township, but lies only in pools during the summer season. The soil is a fair clay loam.—*A. F. Cotton*, 1883.
West; it is rolling prairie, stony on the ridges. Soil, clay loam, from 5 to 18 inches deep, with a clay subsoil. Class 1. Old Wives' Creek flows east, at the rate of 6 miles an hour, across the line at the southern limit of Section 19. The water is about 4 feet deep, with high clay banks. The line crossed the cart trail to Qu'Appelle in Section 18, and an old trail in 30. Several marshes along the line.—*T. Fawcett*, 1882.

- 12. Outlines**—The northern portion is somewhat hilly and broken by ridges. Soil, sandy to clay loam, mostly on a clay subsoil. Water mostly alkaline.—*W. T. Thompson*, 1882.

The north is inclined to be hilly, and has a gravelly clay soil, which ought to produce good crops. Surface water scarce.—*J. G. Sing*, 1882.

Gently-rolling prairie. Soil, a fair clay loam.—*A. F. Cotton*, 1883.

- 13. Outlines**—The southern portion is very hilly along the boundary and for about two miles north. The soil in these hills is a gravelly clay, and if properly cultivated will produce good crops. The water tasted slightly alkaline. The northern part of this township contains good clay soil. Surface, undulating prairie and dry.—*J. G. Sing*, 1882.

Along the west boundary the country is somewhat hilly and broken by ridges, while the soil varies from a sandy to a clay loam, usually on a clay subsoil. The water is mostly alkaline. The south is also somewhat hilly and broken, and possesses very similar features to the western part of the township.—*W. T. Thompson*, 1882.

Land along the north boundary is 3rd class; subsoil, clay. South of the line, in Section 36, is a valley 3 or 4 miles wide, in which a fine creek flows eastward. An alkaline creek, with slow current, flows in a south-easterly direction across the line in Section 34. The west half of Section 31 is very stony, with gravelly ridges. A creek of good water, 40 links wide, 6 inches deep, enters the township immediately north and west of the township corner, flows south, crossing the line, turns and again crosses the line, running in a north-easterly direction. The banks are 70 feet high, and steep; the valley is stony. The east is mostly a dry, arid surface, with boulders in places. Subsoil, clay, gravel and sand. Classes 2, 3 and 4. In Section 12 a creek, partly dry, crosses the line, flowing west; another flowing in the same direction crosses in Section 25, and in Section 36 a marsh was crossed.—*J. G. Sing*, 1882.

Sub-division.—The south-west corner is quite hilly, with some deep gullies and a few fresh-water muskegs. The north branch of Old Wives' Creek passes through the north-east in an alkaline valley. The creek is fresh water, but dries in summer and leaves only standing pools. The soil is a gravelly clay and a clay of loam, of classes 2 and 3.—*W. Chipman*, 1883.

- 14. Outlines.**—Section 2 is 3rd class, the land sloping to the south-west. Section 3 has an alkaline creek flowing slowly through it; soil, class 3. Sections 4, 5 and 6 are class 3. Section 6 is broken and stony, with gravelly ridges. The north branch of Old Wives' Creek (good water), 40 links wide and 6 inches deep, flows in a northerly direction through this section, and then through Sections 5 and 4. The southerly tiers of sections has an undulating surface and a good clay soil, which ought to produce good crops, under proper cultivation. The north is more hilly. In the eastern sections the subsoil is generally clay, though in places stony;

classes 2 and 3. In Section 13 surface stones were found. The north is hilly and stony. Classes 2, 3 and 4. No water. Subsoil is gravel and clay.—*J. G. Sing*, 1882.

The western sections are somewhat hilly and broken. Soil varies from sandy to clay loam. Water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Is a rolling and undulating prairie. Water scarce, except in the standing pools of Old Wives' Creek. Soil, clay loam and gravelly clay. Classes 2 and 3. No wood.—*W. Chipman*, 1883.

- 15. Outlines**.—The southerly one-third of this township is hilly. The soil is generally good, except where too much gravel occurs. Clay loam is the general character of the soil throughout the township. A beautiful valley, about two miles in width, extends across this township in a north-westerly direction. The bottom of this valley consists of the choicest of clay loam, and produces an excellent growth of rich grass. The surface seems to retain the necessary moisture to promote growth. This part of the country has, no doubt, at one time been a great resort of buffalo, as many traces of them are to be seen at the present time.—*J. G. Sing*, 1882.

The western part of the country is broken. Section 30 is the summit of a high range of hills tending north-west, which is approached on the north side by a gradual slope of two miles in length, and to the south dips down somewhat abruptly 150 feet to a level flat, in which a boggy stream wends its way in a south-easterly direction. The land in the vicinity of the stream is poor, while towards the south-west of the township it assumes its normal character, being a good clay loam.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie; soil, sandy loam, of light depth, on sandy subsoil; classes 2 and 3. There are a few marshes, generally containing good water, and no wood. Not eligible for farming purposes.—*P. C. Talbot*, 1883.

- 16. Outlines**.—Composed of some very good farming land. A portion of this township I ranked in my field notes as third-class, on account of the soil being very gravelly and stony; and producing a very poor growth of grass. The surface was also very knolly and broken.—*J. G. Sing*, 1882.

The north boundary is almost entirely submerged by Reed Lake, a large, shallow, brackish lake, extending due west, about 7 miles in length by 3 in width. The soil within three-quarters of a mile of the lake is either a white gravelly or hard, sun-baked clay, in places stony. Southwards, the surface gradually ascends, and is well watered with fresh-water marshes; the soil would average a good second class. West, undulating and rolling prairie. Soil, clay loam, from 6 to 9 inches deep, with clay subsoil; class 2. Section 7 is rather hilly. Reed Lake covers the larger part of Section 31, and an arm extends into Section 30. This arm, where crossed by the line, is 28 chains wide. Several sloughs were crossed, also ridges from 30 to 60 feet high.—*T. Fawcett*, 1882.

Sub-division.—Rolling and undulating prairie, with soils of sandy and clay loam, on subsoils of sand and clay. Reed Lake almost covers the northerly tier of sections, and is bitterly alkaline. Marshes are few, but fairly distributed throughout the township. No wood.—*H. H. Robertson*, 1883.

- 17. Outlines.**—Very hilly, being in the Grand Coteau. The soil is various, sometimes gravelly, stony and sandy; other portions are a clay loam, with a clay subsoil; class 2. Water plentiful, in sloughs and lakes, but is not good. Quite a number of fresh springs run out of the larger hills. The vegetation in this township, though hilly and in many places rough, is high and luxuriant. A cart trail crosses Section 12, north of a large marsh. No timber whatever was seen in this township.—*L. Bolton*, 1882.

The south line intersects Reed Lake, a large, shallow, brackish sheet of water, about 7 miles in length by 3 in width. The soil within three-quarters of a mile of the lake is either a white, gravelly or hard, sun-baked clay, in places stony. The west boundary leaves Reed Lake near the north limit of Section 7. The soil for several miles back from the lake is a very dry-baked clay. In Section 19 the line crosses a drainage basin, 60 chains in width. From this the soil improves, and an excellent tract of country exists.—*T. Fawcett*, 1882.

Sub-division.—High, undulating prairie; surface dry and hard. Water scarce and marshes few. Soil, sandy loam, with sand and clay subsoils; classes 2 and 3. Reed Lake—alkaline—extends almost entirely across the south part of the township, obliterating entirely the southern tier of sections. This township is poor for farming, and the pasturage becomes very dried up if the season is dry. The C. P. R. crosses the township. Morse Station.—*G. C. Rainboth*, 1883.

- 18. Outlines.**—East, rolling and hilly prairie. Soil, clay, sand and gravel; gravel and sand subsoil; class 2. Several sloughs were passed. The land is stony in places. North, rolling prairie. Soil, sandy loam, with gravel subsoil; class 2. Water is plentiful in the sloughs, and also in a large lake situated in Section 34. Two springs, one in Section 33, the other north, and across the line unite and flow south. The vegetation in this township, though hilly and in many places rough, is high and luxuriant, and will afford a good pasture for cattle and horses. No timber whatever was seen in this township, and no living streams of any account exist.—*L. Bolton*, 1882.

The west boundary, northward, presents a gradual ascent. The soil is a rich clay loam. Towards the north end of the township the surface becomes broken by hills and marshes.—*T. Fawcett*, 1882.

Sub-division.—Is a high rolling prairie. Soil, sandy loam, on clay and sand subsoils; classes 2 and 3. There are a few lakes in the township, two of them of considerable size (one 700 acres) and somewhat alkaline. The marshes are usually fresh, and pasturage is good in early summer, but dries up as the season advances, particularly if rain is scarce. No wood. The

south-west quarter of the township contains much less surface water than the balance.—*G. C. Rainboth*, 1883.

19. *Outlines*.—Very hilly, being part of the Grand Coteau. The soil is very varied, many places being very gravelly and stony, and some sandy; other portions are a clay loam, with a clay subsoil. Water is very plentiful in sloughs and small lakes. In many of the lakes the water is not good, being impregnated with different kinds of salts. Quite a number of springs run out of the larger hills; some of them contain very good water. The vegetation in this township, though hilly and in many places rough, is high and luxuriant, and will afford a magnificent pasture for cattle and horses. No timber whatever was seen in this township, and no living streams of any account exist.—*L. Bolton*, 1882.

Mostly rolling prairie on the west boundary, with soil of a very fair quality. Section 31 is rather rough, and is crossed by a couple of trails.—*E. Bray*, 1882.

Sub-division.—Is rough and hilly, with several alkaline lakes and ponds, and numerous fresh-water sloughs. Soil varies from a sandy loam to a clay loam—some class 3, but mostly class 2. No wood; good grazing land. Section 27 contains a large alkaline lake, as also does Sections 4 and 5.—*E. J. Rainboth*, 1883.

20. *Outlines*.—Is very similar to Townships 17, 18 and 19, Ranges 5, 6, 7 and 8, with the exception that the north-west portion of this township is extremely broken by very high hills (called the Vermillion Hills) and the bank of the south branch of the Saskatchewan River. The south is hilly, with numerous sloughs. Soil, clay, with a gravel subsoil. Class 2. Cart trail in Section 6. The east is also hilly, with a similar soil. Sloughs are numerous. Section 36 is on the bank of the Saskatchewan River. In Section 25 are the Vermillion Hills. The Prince Albert trail crosses the line in this section.—*L. Bolton*, 1882.

The north is much broken by deep ravines, which cross the line and run into the valley of the River Saskatchewan. This river has banks probably as much as 450 feet in height. The adjoining sections are very much broken, not only by the banks of the river, but by numerous deep ravines. Very few of these ravines have running streams, but in many, small springs of very salt water are found. The river here is about 45 chains wide, but numerous sandbars occupy, on an average, more than one-half the bed of the stream. Along the west boundary it is chiefly hills and valleys, with some bunches of poplar. A creek crosses Section 7, flowing north.—*E. Bray*, 1882.

Sub-division.—The south-east half is rolling and hilly, the remainder being hilly and much broken by the banks and ravines of the South Saskatchewan River, which runs across the north-west corner, where wood for fuel is abundant. The soil is mostly a sandy loam, excepting along the river bank, where it is a stiff, arid clay. There are a few grass marshes where water is good, which makes it a very good township for grazing, with plenty of shelter in severe weather. The Prince Albert trail crosses the township.—*E. J. Rainboth*, 1883.

- 21. Outlines**—The south is much broken by deep coulées which run into the valley of the Saskatchewan River, which flows eastwards, with banks 450 feet in height. All the southern sections are very much broken, not only by the banks of the river but by numerous deep ravines. Very few of these ravines have running streams, but in many small streams of very salt water are found. The river here is about 45 chains wide, with numerous sand bars. Going north along the west boundary the first section and the half of the second section is much broken by the north bank of the Saskatchewan River. The remaining sections are gently rolling prairie, with a good soil.—*E. Bray*, 1882.

Rolling country, with heavy, dry, clay soil. The South Saskatchewan flows along the eastern boundary for nearly two miles, passing through Sections 13 and 24. The soil along the river is very sandy and light. Small groves of, principally, cottonwood, suitable for fuel and fencing, are found along the banks. The river is about 40 chains wide, and, with the exception of the main channel, about 150 to 200 feet in width, is filled with sand-bars. The north boundary is crossed by two small, sluggish, alkaline streams, flowing southward into the river. That portion of the township lying north of the river is high, rolling prairie, sloping to the south, and well adapted to farming. The soil is sandy loam, with clay subsoil. The sloughs are all slightly alkaline. The south boundary lies at the base of the Eye-brow Hills—*T. R. Hewson*, 1883.

Sub-division.—Rolling and undulating prairie, with a soil, classes 2 and 3, composed of sandy loam and clay subsoil; good for grazing, and in some of the lower levels good for farming. The easterly half is broken by the Saskatchewan River. There are a few bluffs of poplar of small dimensions on Sections 23, 24, 25, 26, 3 and 4, fit for fuel and fencing.—*F. E. Brunelle*, 1883.

- 22. Outlines**.—The land northwards is high, rolling and open prairie, with some sloughs, having permanent water. Gravel in some instances covers the ridges. The soil is chiefly a good, first class clay loam, with clay subsoil.—*J. F. Garden*, 1882.

East, rolling prairie, with deep ravines. Soil is a sand loam, from 8 to 30 inches deep, with clay subsoil. Classes 1 and 3. Ash, poplar and willow were found near the Saskatchewan, which crosses the line in Sections 13, 24 and 25. The south-east is rough and broken, and the south-west is rolling prairie. Soil, sandy loam, from 8 to 20 inches deep, with clay subsoil. Classes 1 and 2. In the east half of Section 2 is an alkaline stream, 25 links wide; in the western part of the same section is another alkaline stream, 15 links wide, and running in a valley 60 feet deep; both streams flow south.—*T. R. Hewson*, 1882.

The west is gently rolling prairie with a good soil.—*E. Bray*, 1882.

Sub-division.—Is a hilly and rolling prairie, broken by the South Saskatchewan River in Sections 13, 24 and 25. The soil throughout is second class; of a sandy loam, on a sandy subsoil.

There are a few bluffs of poplar bush in Sections 1, 2, 11, 12, 13 and 14, good only for fuel. A lake occurs on parts of Sections 4, 9 and 10.—*F. E. Brunelle*, 1883.

- 23. Outlines.**—Going west, along the north boundary, the surface is, for the first two miles, dry, undulating prairie, with a stiff clay soil. Thence to the west boundary of the township the land is high and rolling, with a clay loam soil, graded from 1st to 2nd class. The east is undulating, dry prairie, with hard clay soil. Some permanent water in sloughs. The land southwards is high, rolling and open prairie, with some permanent water, and gravel in some instances, on the ridges. The soil is chiefly a good 1st class clay loam, with clay subsoil.—*J. F. Garden*, 1882.

Along the west boundary the land is high, undulating prairie, ascending towards the 6th correction line, and of first quality.—*T. Kains*, 1882.

Sub-division.—The surface of this township is very undulating, has very few marshes or lakes and is destitute of wood. Soil, generally a sandy and sometimes clay loam, on a clay subsoil; class 1.—*J. Burke*, 1883.

- 24. Outlines.**—Sections 1 and 2 are dry, undulating prairie, with a stiff clay soil. Sections 3, 4, 5 and 6 are high and rolling, with a clay loam soil, graded from 1st to 2nd class. The easterly sections are rolling, open prairie, with a good first-class clay or clay loam, and in some places hummocky clay soil. Some of the ridges show a little gravel. At the south-east corner of this township there is a coulée, with water-course, containing permanent water.—*J. F. Garden*, 1882.

The north shore of Devil's Lake lies a few miles south of the north boundary of this township, and extends westward into Range 9. It is six miles long and about three miles broad. Several small streams of good water flow into it; but the lake water is unfit for use, having a most disagreeable taste and smell. The soil is of first quality. On the west boundary the three northern sections are submerged by the lake. The three southern sections are high, undulating prairie, with a soil of first rate quality.—*T. Kains*, 1882.

Sub-division.—Devil's Lake covers 5,000 acres. The water is unfit for use, and the shores abound with feathered game. The land of the township is level, except south-east corner where it is rolling, especially in Sections 4, 5, 6, 7, 8 and 9. The soil in the southern part is a light clay loam, on clay subsoil, but towards the northern boundary it gets lighter, with a sandy subsoil. Will grade classes 1 to 2.—*J. Burke*, 1883.

- 25. Outlines.**—Southwards, the soil is first quality and sloping towards the shores of Devil's Lake in Township 24, south of the base line.—*T. Kains*, 1882.

Sub-division.—The principal or north-western part of this township lies inside of the Eagle Hills and is here rather rough and broken by a few large coulées, whose banks, about 30 chains apart, are almost perpendicular. Through each of these coulées a small stream of clear water runs towards Devil's Lake.

South-east, the township is level with a very few marshes or lakes. Soil, a light clay loam, on a clay subsoil. There is a grove of soft maple, willows and scrub on Section 8, all there is in the township.—*J. Burke, 1883.*

- 26. Outlines.**—East, rolling prairie. Soil, light sandy loam, about 6 inches deep, and, in places, sand. The subsoil is sand. Class 3. Red Deer Creek, an alkaline stream, crosses the line in Section 25, flowing eastwards through a valley, 300 feet deep, with brush on the south side of the ravines. West, hilly prairie, hills ranging from 50 to 150 feet in height. Soil, sandy loam, with gravel in places. Subsoil, sand and gravel. Classes 2 and 3. The surface is broken by sloughs; a lakelet of clear, deep water is in the south half of Section 18. A small creek, flowing east is in Section 6.—*J. A. Maddock, 1883.*

Sub-division.—The north-east corner is traversed by Red Deer Creek, which enters on Section 34 and leaves at 25 and dries up greatly during the summer. There are a few bluffs of poplar and willow along its banks, but only fit for fuel. Along the centre line, and in the western half of the township, are a good many marshes; but the eastern half is rather dry and undulating. The subsoil in some places is clay, and in others sand; the best land being in the western part of the township.—*J. Burke, 1883.*

- 27. Outlines.**—East, Sections 36, 25 and 24 are 3rd class, being broken by the the valley of the Saskatchewan River. The remaining sections are level prairie. Soil, sandy loam, 6 inches deep, with sand subsoil. Class 3. In 36 a creek, 1 chain wide and from 1 to 3 feet deep, flows through a ravine into the river. Ravines from 50 to 100 feet deep were also crossed. West, rolling prairie. Soil sandy loam, about 6 inches deep, with sand subsoil. Class 2. In Section 30 the line crosses Red Deer Lake, 800 yards wide here, lying in the bottom of a valley 200 feet deep; the water is deep and slightly alkaline. In Section 7 another valley, 150 feet deep, is crossed. This valley, as well as that of Red Deer Lake, contains poplar and ash, the latter being 9 inches diameter.—*J. A. Maddock, 1883.*

Sub-division.—Is a high rolling prairie, broken on the south-west half by the Red Deer Lakes and on the north-east by the Saskatchewan River, which contains fresh water, and has broken banks about 150 feet high, covered in patches with poplar bush. The Red Deer Lakes—almost fresh—which occupy the south-west, are situate in a deep coulée, the banks of which are about 80 feet high. The soil is class 3, being a light sandy loam. Is a poor farming township.—*M. J. Charbonneau, 1883.*

- 28. Outlines.**—North-east of the River Saskatchewan is worthless for farming purposes, being a sandy plain, upon which there is little grass, and in places the wind has blown the loose material into large mounds. A few small poplar groves, scattered clumps of scrub-oak, and patches of scrub, grow on the east bank of the river. The country changes at once after crossing the river, and good rolling prairie, with a soil of light clay loam, continues westward. The timber on the west bank, in ravines, consists of poplar, balm of

Gilead, with some maple and oak, but the quantity is rather limited. The river here is from 100 to 120 feet below the prairie, and is 32 chains wide, 15 of which is sand bars, covered at high water. The current is about 3 miles an hour, and water has muddy appearance.—*T. Kains*, 1882.

Rolling prairie. The Saskatchewan crosses the north-east and follows the eastern boundary for $2\frac{1}{2}$ miles. The west is cut up by deep ravines, generally containing wood. Eastern Sections 36, 25 and 24, are rolling and level prairie. Soil, light sandy loam, 6 inches deep, sand subsoil. Class 3. The Saskatchewan River follows the line across the south half of Section 13, and all of 12 and 1. The banks are from 100 to 200 feet high. Sections 13, 12 and 1, soil light sandy loam, 6 inches deep, with sand subsoil. Class 3. West, rolling and broken prairie. Soil, black and sandy loam, 6 inches deep. Classes 1 and 2. A couple of ravines, from 75 to 125 feet deep, containing poplar and ash, were crossed in Section 31, and a large marsh in Section 30.—*J. A. Maddock*, 1883.

Sub-division.—Is high rolling prairie, broken in a diagonal direction by the South Saskatchewan River, which flows from Section 1 to Section 32. The river is about half a mile broad, and has a 4 mile current, and fresh water. The banks, which are about 200 feet high, are covered with poplar and willow bush. The river contains numerous sand bars. North of the river the prairie is somewhat brushy; but south of the river there is very little. The soil, generally, is a sandy loam, about 7 inches deep, and class 3, and in some places it is a little above that grade.—*M. J. Charbonneau*, 1883.

29. *Outlines*.—Rolling prairie. South Saskatchewan River crosses the line in Section 33. In Section 32 a trail was crossed. A small creek crosses the line in Section 31.—*M. Deane*, 1884.

The Saskatchewan runs north and south through about the centre of the township, and is well wooded on its western bank. The south-east is chiefly sand hills along the river. The east side of the river is slightly-rolling prairie, and the west side undulating prairie. Soil, a sandy loam, with sand subsoil. The east line is rolling and level prairie. Soil is light sandy loam, about 6 inches deep, with sand subsoil. Class 3. Water scarce. The west boundary is rolling and undulating prairie. Soil, sandy loam, about 6 inches deep, with sand subsoil. Class 2.—*J. A. Maddock*, 1882.

The land south-east of the River Saskatchewan is a worthless sandy plain; in places the sand is blown into hillocks. Small poplar and scattered clumps of scrub oak grow on the east bank of the river. West of the river the surface is good rolling prairie. Soil, clay loam, having poplar and balm of Gilead, also a small quantity of maple and oak. The river is here about 700 yards wide, and runs between banks about 120 feet high. The current is about 3 miles an hour.—*T. Kains*, 1882.

Sub-division.—The land is undulating prairie, and is not as good as is generally to be found in this section of country, being

very arid and sandy. There is no wood, except some small poplar and scrubby ash on the margin of the South Saskatchewan, which runs north the whole length of the township, dividing it nearly into two equal parts. This river, though large and rapid, must always be navigated with difficulty, owing to the numerous shoals and sandbars.—*M. Deane*, 1884.

- 30** *Outlines*.—Is rolling and undulating prairie. The Saskatchewan flows north-east through this township. East, rolling prairie, with scrub in places. Soil is a light sandy loam, about 6 inches deep, with sand subsoil. Class 3. Sections 1, 12 and 13 are scrubby. Water is scarce. West, undulating and rolling prairie. Soil, sandy loam, 6 inches deep, with a sand and clay subsoil. Class 2. No water.—*J. A. Maddock*, 1883.

Sub-division.—This township is nearly all composed of undulating prairie, having a sandy soil and subsoil. Wood is scarce, and only to be obtained on the banks of the South Saskatchewan which runs through the township, dividing it into nearly two equal parts. East of the river it is scrubby; west, entirely open.—*M. Deane*, 1884.

- 31** *Outlines*.—The eastern sections are rolling and hilly country. Section 1 is entirely taken up by the South Saskatchewan River. Sections 12 and 13 are in rolling prairie; third class. Sections 24, 25 and 36 have light sandy soil, and have also a good deal of small wood and brush growing on them; fourth class. The bed of the South Saskatchewan River, which is crossed in Section 1, is depressed about 125 feet below prairie level, and is very much obstructed by sand bars. The banks are steep on both sides, and are fringed with some nice wood, consisting of ash, maple and poplar. The west is in a rolling to knolly country, with sandy loam soil, generally; second class.—*F. W. Wilkins*, 1883.

- 32** *Outlines*.—Eastwards, hilly country, with a light sandy soil, and a good deal of poplar on Sections 1, 12 and 13; fourth class. Along the north, Sections 31, 32 and 33 are in a low, flat country, with a little wood, and will make good hay land. Sections 34, 35 and 36 are hilly, with some wood, and a light sandy soil; class 4 throughout. Westerly sections are in a rolling to knolly country, with a little small wood in places, and having a light sandy soil, generally; third and fourth classes, excepting Section 31, which is first class.—*F. W. Wilkins*, 1883.

The north, excepting some sand ridges in Section 36, is gently-rolling prairie.—*E. Bray*, 1883.

- 33** *Outlines*.—The northern Sections, 31, 32 and 33, have clay loam soil, and are first class. Sections 34 and 35, with sandy loam soil, are second class. Section 36, which is marshy, is fourth class. All consist of rolling prairie. The south Sections, 4, 5 and 6, are in a low, flat country, with a little small wood in clumps. This would make good hay land. Sections 1, 2 and 3 are in a knolly to hilly country, with a good deal of small wood, and with very light sandy soil; fourth class throughout. Along the east boundary it is open, gently-rolling prairie, with light sandy soil, which is third and fourth class. The southern portion of Section

1 is knolly. In Section 36 a saline pond was crossed. Westward, open rolling prairie. Soil, clay loam, and first class throughout.—*F. W. Wilkins, 1883.*

The south is gently-rolling prairie.—*E. Bray, 1883.*

Sub-division.—The surface, throughout, is rolling prairie. The soil, on all except Sections 1, 2, 11, 12, 13 and 14, is sandy loam, 12 to 14 inches in depth, with clay subsoil, and is class 2. On the sections aforesaid the soil is sandy loam, 12 to 15 inches deep, with subsoil of sand, and class 3. Between 65 and 80 chains going northward on the east boundary of Section 33 is a marsh or muskeg; otherwise there is very little surface water, except in a few and scattering marshes. There is no wood, except a few clumps in the south-east corner.—*C. E. Towle, 1884.*

- 34. Outlines.**—Eastwards is a hilly country, with numerous springy places and small marshes, a light sandy soil, and having a good deal of small wood. Fourth class. Southwards it is rolling prairie. Sections 4, 5 and 6 have clay loam soil, and are first class. Section 2 and 3, with sandyloam soil, are second class. Section 1, which is marshy, is fourth class. Along the west it is open, rolling prairie. Sections 6, 7 and the south half of 18 are first class, with clay loam soil. Balance of this line is second and third class, with sand loam soil. A small spring creek, having quite a deep valley, is in Section 19; course, north-east.—*F. W. Wilkins, 1883.*

Sub-division.—Surface, rolling prairie. Soil, sandy loam, 12 to 14 inches deep, with clay subsoil. Class 2. Timber was seen in Sections 34 and 35. It is small poplar, from 1 to 3 inches in diameter. There are also some small poplars and willows on the western part of Section 36. In Section 31 the line crosses a small creek, which meanders from Section 19 through 30 and 31 to here.—*C. E. Towle, 1884.*

- 35. Outlines.**—Eastwards is a rolling country. Section 1 is almost entirely covered with a thick growth of young poplars. The large timber (all dead and lying down) appears to have been killed by fire. The soil on Section 1 is light and sandy, and is rated fourth class. The balance of this line going north is mostly first class, with dark clay and sandy loam soils. The west is hilly prairie in general, with clay and sandy loam soil; mostly first class, and some second and third. A number of dry watercourses and a small spring creek cross the line with an easterly course.—*F. W. Wilkins, 1883.*

Sub-division.—Undulating and level prairie, with some clumps of willow and poplar bushes. It is generally well adapted for settlement, except Sections 1, 2 and 3, which consist of small hills of drifting sand, covered with clumps of willow and poplar. Elsewhere the soil is a clay loam, and capable of growing fine crops. Plenty of good water can be obtained by means of wells. Large hay marshes are numerous. A large alkaline lake occupies Sections 19, 30, 31 and 32, with some low marshy land in its vicinity, on Sections 20 and 29. From this lake a small creek flows along the westerly sections southwards, but this dries up

by the middle of summer. There are thick poplar woods in Section 1.—*F. Purvis*, 1884.

- 36.** *Outlines.*—The north-east part is almost pure sand, but the north-west part is better soil.—*W. A. Ashe*, 1882.

The East is mostly in an open rolling prairie. Sections 1 and 12 have a dark clay loam; soil, first class. The soil over the balance of this line is rather light and sandy; third class. A long and narrow alkaline lake is crossed in Section 25. The west boundary lies along an open rolling prairie, with clay and sandy loam soils generally; first and second class. A few good-sized fresh-water marshes on Sections 18 and 19.—*F. W. Wilkins*, 1883.

Sub-division.—The north-east is much broken by small sand hills, with intervening alkaline marshes. The hills are covered partially with a thick growth of willows and young poplars. The remainder of the township—excepting adjacent to a large lake, covering 2,000 acres, in the south-west quarter—is good agricultural land, and if good water can be found, is well adapted for settlement. Large hay marshes are numerous; and if no fires occur, fuel will be plentiful in a few years.—*F. Purvis*, 1884.

- 37.** *Outlines.*—Centrally—east and west—this township is prairie, with small bluffs of poplar and clumps of willows. Soil, sandy and class 2. A lake and cart trail crosses the line in Section 6.—*J. S. Dennis, jun.*, 1878.

North, rolling and level prairie. Soil is a black or sandy loam. Little scrub was found in Section 6.—*F. Vincent*, 1884.

The south-east part is almost pure sand; the west part is better soil.—*W. A. Ashe*, 1882.

Surface, rolling or hilly. Water scarce, and generally alkaline. The soil of the eastern part is sand, or sand loam; third class. Towards the western part the soil improves, and is second class. The township is timbered throughout with clumps of poplar and willow, which have been burnt over by fire, forming *brûlés*. A considerable quantity of this wood might be used for fencing or fuel.—*A. G. Cavana*, 1883.

Sub-division—Very poor soil, light and sandy. Water is plentiful, but all alkaline. Hay marshes are numerous, and about half the area of the township is covered with a dense growth of young poplar and willow. The brush occurs in clumps, with intervening patches of prairie. A trail crosses the north part. The east appears to have been, at one time, covered with a dense growth of poplar, now destroyed by fire.—*F. Purvis*, 1884.

- 38.** *Outlines.*—The surface is slightly rolling, sloughs numerous, and bordered with poplar and willow. The soil of the eastern part of the township is a fair sand loam, and second class. The western part is first class.—*A. G. Cavana*, 1883.

Sub-division.—Rolling prairie. The soil is a good sandy or black loam, with a sandy or clay subsoil, and having no growth of wood. Surface water may be obtained everywhere. The township may be rated a good second class. A cart trail and the telegraph line cross the northern tier of sections.—*F. Vincent*, 1884.

- 39. Outlines.**—In the western part of this township the surface is rolling, but approaching the eastern part it becomes more level. The North Saskatchewan River crosses the township in an easterly direction. Clumps of small poplar are thickly dotted over that part of the township north of the river. The soil throughout is first class, being clay loam on clay subsoil. A creek flows southward across the western part of the township into the Saskatchewan, and might be utilized for milling purposes. Below its junction with a creek from the west, it has good banks, a rapid current, and a stream averaging 8 feet in width and 1 foot in depth.—*A. G. Cavana*, 1883.

North, rolling prairie, with scattered bluffs of poplar and willow. Class 1. A few stones in Section 31. A spring creek, 10 links wide, with stony banks, flows southward across the line of Section 31, in the bottom of a wooded ravine, 100 feet deep.—*J. Doupe*, 1883.

Sub-division.—South of the Saskatchewan River, it is rolling and level prairie. Soil is a good sandy loam. Trail crosses the line in Section 3, going north to the river.—*F. Vincent*, 1884.

Sub-division.—North of the Saskatchewan River, it is composed of good soil, almost averaging class 1, excepting in the south-east, which is very stony. Wood on the slope of the river is more plentiful than on the upper plateau, which is bare, except occasional bluffs of poplar; none of the timber measures more than 4 inches, except a few trees growing in the ravines. On the shore line of Section 25 a dense willow and marshy flat occurs, in which a few large cottonwood trees are found, and near which a fine fresh water creek flows out of a deep ravine. Some excellent springs flow out of the river bank. Surface water beyond the river is not plentiful, and except in the north-eastern corner hay land is scarce.—*R. Laurie*, 1883.

- 40. Outlines.**—Going west on the north boundary the country is dry, and covered with boulders for the first mile, but more level than western part of Range 7. Level, dry and sandy across the next two and a-half miles; then somewhat marshy to the west.—*G. B. Abrey*, 1882.

Along the east and west boundaries the surface is rolling, and thickly dotted with clumps of small poplar and willows. Soil, first class.—*A. G. Cavana*, 1883.

Sub-division.—Undulating and gently rolling and brushy, with here and there bluffs of poplar and willow, suitable only for fuel. Soil, clay loam on clay subsoil. A good many marshes and ponds are distributed throughout, containing fresh water. A good farming township. The south, rolling prairie, with scattered bluffs of poplar and willow. Class 1. A few stones in Section 31. A spring creek, 7 feet wide, with stony banks, flows southward across the line of Section 6, in the bottom of a wooded ravine 100 feet deep.—*J. Doupe*, 1883.

- 41. Outlines.**—South-eastwards the country is dry and covered with boulders for the first mile. Level, dry and sandy across Sections 2, 3 and 4; then somewhat marshy on Sections 5 and 6.—*G. B. Abrey*, 1882.

The southern portion of the east boundary, as far as the middle of Section 25, is exceedingly stony prairie. The balance is rolling prairie and first class agricultural land, and embraces Sections 25 and 36. The westerly sections are first class prairie, slightly stony in places.—*J. K. McLean*, 1883.

- 42. Outlines.**—The west sections are first class prairie, slightly stony in places, with numerous bluffs of small poplar and willow scrub, as far as Red Berry Lake*, a large lake crossing Section 31. The water of this lake is alkaline. Eastwards it is rolling prairie and first class agricultural land, as far north as a large salt lake† in Section 7. After crossing this lake the country is generally rolling, with a rich sand loam soil, and covered with numerous bluffs of poplar, averaging about 7 inches in diameter.—*J. K. McLean*, 1883.

- 43. Outlines.**—Red Berry Lake occupies nearly one-third of the south-east of this township. This lake appears to extend as far as the east boundary, and is met with on Section 19. From there it makes a considerable curve in the north, towards the east, after which it runs south-east. Bluffs of poplar are scattered here and there. The surface is rolling and hilly.—*J. I. Dufresne*, 1884.

East, high, hilly land, thickly timbered with poplar of a good average size. Some open prairie. Open ponds are numerous.—*F. L. Foster*, 1884.

- 44. Outlines.**—The soil adjoining the north boundary is generally of a high average, consisting of an excellent sandy loam, with a clay subsoil. Sufficient poplar for building, fencing and fuel purposes was found; also good water.—*W. A. Ashe*, 1883.

West, hilly and rolling prairie, with small poplar and willow bluffs. Pitt and Carlton trail crosses the line in Section 6. In Section 19 a creek, flowing south-east, was crossed. Numerous clear-water ponds were seen.—*J. I. Dufresne*, 1884.

East, prairie; cart trail to Carlton was crossed in Section 12. A large lake extends over Section 13 and part of Section 24. A good deal of scrub was seen along this line.—*F. L. Foster*, 1884.

- 45. Outlines.**—West, rolling prairie; poplar and willow. Cart trail from Jack Fish Lake to Carlton crosses the line in Section 6. Open ponds are numerous.—*J. I. Dufresne*, 1884.

East, scrub and bluffs alternating. In Section 12 an alkaline creek was crossed, and in Section 1 an old cart trail.—*H. W. Selby*, 1884.

Southwards, soil an excellent sandy loam, with a clay subsoil. Poplar for building, fencing and fuel may be obtained; also good water.—*W. A. Ashe*, 1883.

Along the east boundary the country is rolling through Sections 1, 12, 13, but through Sections 24, 25 and 36, hilly, with a thick growth of brush. The soil is rich sandy and clay loam, on clay bottom, with numerous alkaline sloughs and ponds. The

*This is a large sheet of water, about 6 or 7 miles each way, and extending into the townships north and west. *Map.*

†This is a long lake, about a mile and a-half across, and extends east and west nearly across this township. *Map.*

vegetation is very luxuriant. On Section 24 there is a large alkaline lake.—*H. W. Selby*, 1884.

- 46.** *Outlines.*—West, rolling prairie. Sections 6 and half of 7 are green poplar and willow. On remainder of the line the bush has all been burnt. Several open ponds were seen.—*J. I. Dufresne*, 1884.

There is a large body of water, called Paddling Lake, which is about eight miles long, and extends from this township eastwardly. *Map.*

- 48.** *Outlines.*—North, rolling land, covered with thick poplar, shrubbery or scrub. A few large poplar, from 3 to 7 inches in diameter, and some spruce around the swamps and sloughs, some of the latter being quite deep. A dog trail crosses the north of Section 31. The soil is poor and ranks as second class. The country is very rough, the line crossing the Thickwood Hills covered thickly with timber, a small portion being very good spruce.—*T. Drummond*, 1883.
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TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE IX.

7. *Outlines*.—Rolling heavily, with small stones and fine gravel on the ridges. Two of the tributaries of the south branch of Old Wives' Creek flow through this township. These cross the north and north-west. The water is alkaline, and in summer lies only in pools. In Sections 6 and 7 there are a number of ridges, and in Sections 12 and 13 several dry coulees. Beyond the creek there is very little surface water in the township. The soil is a sandy and clay loam, 4 to 9 inches deep, on a brown clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
8. *Outlines*.—North, rolling and undulating prairie. In Section 32 a small creek crosses the line.—*T. Fawcett*, 1882.
Rolling prairie, very stony in Sections 7 and 18. Soil, sandy loam, from 3 to 6 inches; clay subsoil; classes 2 and 3. South half of 18 and north of 7 are 4th class. A cart trail crosses the line in Section 6. Numerous ridges, from 20 to 40 feet high, were crossed. Water not plentiful, though a little was seen. Westerly portion hilly and stony; the balance heavily-rolling.—*A. O. Wheeler*, 1883.
9. *Outlines*.—This township lies on the southern slope of the large valley crossing in Range 10, which trends nearly due east throughout the width of the range. The soil is a brownish friable clay, and the subsoil a 'gravelly white clay, which is almost impermeable. Surface, rolling and undulating. East, undulating and hilly prairie. Soil is clay loam, from 4 to 18 inches deep, with clay subsoil. Classes 1 and 2. Several ridges and ravines were crossed, with stones on the hill sides. Some of the hills 60 feet high.—*T. Fawcett*, 1882.
Heavily-rolling prairie, with gravel and stones on most of the ridges. Country dry and the soil a sandy loam, with clay subsoil. Class 2. Numerous small ridges.—*A. O. Wheeler*, 1883.
10. *Outlines*.—East, undulating prairie. Soil is clay loam, from 4 to 20 inches deep, with clay subsoil. Class 1. The north half of 36 is a large marsh, extending 120 chains east and 30 chains west; average depth, 3 feet. In Section 1 water is abundant and the pasturage excellent.—*T. Fawcett*, 1882.
Heavily, rolling prairie, with gravel and stones on most of the ridges. The trail from Fort Walsh to Qu'Appelle passes through the north-west corner. The country here is very dry, a large slough in the southern portion of this township and a part of one in the north-west corner being the only fresh water found in Ranges 9 and 10 and Townships 9 and 10. The soil is a sandy loam, with clay subsoil. Class 2.—*A. O. Wheeler*, 1883.
11. *Outlines*.—Along the west boundary the land is gently-rolling prairie, with a few dry sloughs. Old Wives' Creek runs through this township. The soil is bare clay.—*A. F. Cotton*, 1883.

East, rolling and undulating prairie, stony in places. Soil, clay loam, from 4 to 24 inches deep; with clay subsoil. Class 2. An old cart trail crosses the line in Section 25. In Section 24 Old Wives' Creek with high clay banks, crosses the line, flowing eastward. The water is 4 feet deep and the current runs about 6 miles an hour. Cart trail to Qu'Appelle, south of Old Wives' Lake, crosses the line in Section 13. Several marshes along the line.—*T. Fawcett, 1882.*

- 12. Outlines.**—The west boundary was run over hilly prairie, broken by ravines, in some of which there is a little quantity of small maple. Water is very scarce. The soil is a clay loam.—*A. F. Cotton, 1883.*

East, rolling prairie, stony on the ridges. Soil, clay loam, from 4 to 18 inches deep, with stony and gravelly clay. Classes 1 and 2. Numerous marshes were crossed. Section 1 is very hilly and stony.—*T. Fawcett, 1882.*

The north boundary lies over a country somewhat hilly and broken by ridges, with a soil varying from a sandy to a clay loam, usually on a clay subsoil. Water mostly alkaline.—*W. T. Thompson, 1882.*

- 13. Outlines.**—Is somewhat hilly and broken by ridges. The soil varies from sandy to clay loam, and in most cases has a clay subsoil. Numerous alkaline ponds and flats are to be found.—*W. T. Thompson, 1882.*

Northwards it is rolling and level prairie. The alluvial soil is from 5 to 10 inches, on a clay subsoil. Class 3. A couple of grass sloughs were crossed, and in Section 36 a small creek, 3 or 4 feet wide, flowing north. West, rolling prairie. Alluvial soil, from 7 to 12 inches deep, with clay subsoil. Class 3. In Section 30 an alkali creek crosses the line, flowing in a north-easterly direction; at the time of survey (August) it was nearly dry. The banks are 20 feet high.—*J. K. McLean, 1882.*

Sub-division.—Is hilly to the east and south-east, and rolling to the west. The north branch of Old Wives' Creek traverses the township about a mile south of the north boundary. In summer the water is fresh in the pools of the creek, but the creek is not then flowing. Soil, a clay loam, on gravel subsoil generally. Classes 2 and 3.—*W. Chipman, 1883.*

- 14. Outlines.**—Is somewhat hilly and broken by ridges. The soil varies from sandy to clay loam, and in most cases has a clay subsoil. Third class. Numerous alkaline ponds and flats are to be found.—*W. Thompson, 1882.*

West, rolling prairie. North, Sections 31 and 32 are rolling prairie; 33 and 36 rolling and hilly; Nos. 34 and 35 are nearly level—an alkali flat. No water along this line. West, rolling and hilly prairie. Ridges and hills from 30 to 80 feet high were crossed. The north half of Section 19 is hilly, stony prairie. No water along the line. South, rolling and level prairie. Throughout the township the soil is from 5 to 10 inches deep, on a clay subsoil. Class 3. Two grass sloughs were crossed on the south line, and in Section 1 a small creek, 5 links wide, flowing north.—*J. K. McLean, 1882.*

Sub-division.—A broad valley lies due north-west across the township, connecting a large alkaline lake with Old Wives' Creek Valley, in Range 8, and containing a number of fresh-water pools. The soil of the valley is alkaline in places, and the soil elsewhere varies between sandy clay and gravelly loams. There is no wood.—*W. Chipman*, 1883.

- 15. Outlines.**—In Section 25 the east boundary reaches the summit of a high range of hills, trending north-west. This range is approached on the north side by a gradual slope of 2 miles in length, and on the south dips down somewhat abruptly, 150 feet, to a level flat, in which a boggy creek winds its way in a south-easterly direction. The land in the vicinity of the stream is poor, while towards the south end of the township it is a good clay loam. In the western, northern and southern portions the land ranks third class. Numerous alkaline ponds and flats are to be found.—*T. Fawcett*, 1882.

Surveyed the western, southern and the northern lines, and found them rolling prairie, without wood and with very little surface water. There is a small pond in Section 35 and a creek flowing west in Section 18.—*J. K. McLean*, 1882.

Sub-division.—Is rolling prairie. Soil, sandy loam on sandy subsoil. Class 2. Little adapted for agriculture owing to the scarcity of water. No wood.—*P. C. Talbot*, 1883.

- 16. Outlines.**—North-east is hilly, with numerous alkaline ponds and flats. Soil, in the south and west, third class. In Section 32 a boggy alkaline stream flows south-east, connecting Rush and Reed Lakes. The latter lake, in Section 35, is shallow and brackish, extending nearly due west about 7 miles by 3 in width. The soil within three quarters of a mile of the lake is either a white gravelly or hard sun-baked clay, in places stony. West of the lake is a flat, mostly hard-caked clay of an alkaline nature. In the eastern portion the surface gradually ascends, and is well watered with fresh-water marshes. The soil would average a good second class.—*T. Fawcett*, 1882.

Surveyed the north and the west boundaries. Surface rolling, dry and unwooded, except Sections 1, 2, 30 and 31, which are heavy-rolling, with a number of alkaline ponds.—*J. K. McLean*, 1882.

The surface generally is rolling; the soil is classes 2 and 3, being composed of a sandy loam on a sandy subsoil. Water is scarce in the south-west half, but in the north-east half there are a number of marshes, and Reed Lake breaks upon Sections 35 and 36. The land may be somewhat adapted for grazing. There is no wood.—*H. H. Robertson*, 1883.

- 17. Outlines.**—The south boundary leaves Reed Lake in Section 2, extending westwards through a flat, mostly hard-caked clay, of an alkaline nature; and in Section 5 crosses a boggy alkaline stream, flowing south-east and connecting Rush and Reed Lakes. The soil, for several miles back from the lake, is a very dry, baked clay. In Section 24 the east boundary crosses a drainage basin 60 chains wide; from this the soil improves, and an excel-

lent tract of country exists. Part of Section 31 is a hard clay plain. Section 32, and part of Sections 31 and 33, are in a large alkaline lake. The remainder of this line is in a hilly prairie, with a few marshes. Soil, a hard, sandy and gravelly loam. Class 3.—*T. Fawcett*, 1882.

The west boundary, across Sections 6 and 7, is hilly, with fair light clay loam soil, clay subsoil in places, with a good many ponds. Class 3. Balance of line an excellent sandy loam, rolling, open prairie. Class 1. Sections 31, 32 and 33 are broken by a large lake. A marsh lies on the north-west portion of Section 35, and both this section and 36 are somewhat hilly.—*F. W. Wilkins*, 1882.

Sub-division.—Is a rolling and level prairie—the west half being rolling, the east half level. A portion of Reed Lake covers about 2,500 acres of the south-east part. A portion of an alkaline lake covers about 1,400 acres of Sections 28, 29, 30, 31, 32 and 33. There are several soft-water marshes. The soil around the lakes is clay; inland it is generally a clay loam. Class 2. The St. Herbert Station, C.P.R., is located on Section 7.—*J. J. McKenna*, 1883.

18. *Outlines*.—Eastwards, the soil is a rich sandy or clay loam, with whitish clay subsoil. Class 3. On the tops of hills and ridges the surface is a little stony. Towards the north end the surface becomes broken by hills and marshes, and in the eastern portion presents a gradual ascent towards the north.—*T. Fawcett*, 1882.

The western sections are open, rolling prairie. The soil, with the exception of the south half of Section 31—which is a hard clay—is a fair sandy loam. Class 3. The northern sections are hilly and rough, and sometimes stony in places. The soil is a sandy loam, averaging 9 inches deep, on a clay subsoil, and classes 2 and 3. There are several marshes, and on Sections 33 and 34 one large one.—*F. W. Wilkins*, 1882.

Sub-division.—Is hilly towards the east and rolling to the west. There are two lakes—slightly alkaline—and portion of the Township 17 alkaline lake. There is also a number of marshes, all of them fresh. Soil, generally clay loam, with sand and gravel on the hills; generally classes 2 and 3. This is a good grazing township.—*J. J. McKenna*, 1883.

19. *Outlines*.—Southwards, hilly and rough prairie, very stony in places. Soil is sandy loam, from 5 to 12 inches deep, with clay subsoil. Classes 2 and 3. Several marshes were crossed. Westwards, open, rolling prairie. Soil and subsoil sandy and clay loam. Classes 1 and 2. Several marshes were crossed. In Section 18 the trails from Carlton to Fort Walsh and Red Deer Forks cross the line.—*F. W. Wilkins*, 1882.

Mostly rolling prairie, with soil of a very fair quality in the eastern sections.—*E. Bray*, 1882.

Sub-division.—Rolling prairie northwards, in some places rather hilly. Soil is a clay loam, about 6 inches deep, with a clay subsoil. Class 2. Surface, lakes, ponds, marshes and soil similar to Township 18, except the soil in west, which is a fine clay loam;

class 1. There is some good poplar timber in the ravines of Sections 31 and 32. These ravines are breakings from the Saskatchewan River banks in Township 20. An old trail in Section 35.—*J. J. McKenna, 1883.*

- 20. Outlines.**—West, very rough, broken and stony, except Section 6, which is undulating prairie. Soil and subsoil is clay and sandy loam. Classes 4 and 5. Section 6 is first class. The South Saskatchewan River crosses the line in Sections 31 and 30. In Section 18 a spring brook, 300 feet below the prairie level, crosses the line, flowing west. Poplar woods were seen in Sections 7 18 and 19.—*F. W. Wilkins, 1882.*

South, hilly and rolling prairie. Soil is clay loam, about 6 inches deep, on a clay subsoil. Class 2. Several ravines were crossed, in which poplar brush of 10 inches diameter was found. In Sections 2 and 5 the line is crossed by trails. A few marshes were seen.—*J. J. McKenna, 1883.*

In crossing the range by the north boundary the line leaves the Saskatchewan River in Section 36, and crosses the same river again in Sections 32 and 31. The banks of the river are probably as much as 450 feet in height, and the adjoining Sections are much broken, not only by banks of the river, but by numerous deep ravines. Very few of these ravines have running streams, but in many, small springs of very salt water were found. The river here is about 45 chains in width, but numerous sandbars occupy, on an average, more than one-half the bed of the stream. This township is very much broken by hills and ravines.—*E. Bray, 1882.*

Sub-division.—The South Saskatchewan River runs into this township. The two south tiers of sections are level, with the exception of two ravines running north to the river. The remainder of the township is largely cut up by deep ravines. The descent to the valley is about 350 feet, and very broken, the larger ravines containing poplar bush. The soil of the southern tiers is sandy and clay loams, class 2, and is well suited for settlement or grazing, as the pasturage is good, and good winter shelter is to be had in the ravines.—*G. C. Rainboth, 1883.*

- 21. Outlines.**—The Saskatchewan River crosses Section 5, flowing north-east, and coursing round the north of Sections 4, 3 and 2, passes out of the township at the south-east corner, after crossing Section 1. All the southern sections are thereby rendered very hilly and broken, and are not above class 4. The east part, north from Section 12, is gently-rolling prairie, with a good soil.—*E. Bray, 1882.*

The west is undulating and rolling. The soil is a sandy loam about, 6 inches deep, on a clay subsoil. Class 2. Big Coulee, running to the river, is very wide, and from 350 to 400 feet deep. It crosses this line in Sections 18 and 19. Very little water along the line.—*G. C. Rainboth, 1882.*

Sub-division.—Very rolling prairie, with a sandy and gravelly alluvial soil, and a clay and gravelly subsoil. Classes 2, 3 and 4. The Saskatchewan River crosses Sections 1, 12, 2, 11, 3, 10, 4, 9,

5 and 6. The banks are covered with some oak, but chiefly poplar and willows, good for fences and fuel. The northern part of the township is the best adapted for agriculture, but is poor, notwithstanding. It is rolling prairie. Sandy loam soil, about 6 inches deep, with clay subsoil. Class 3. Water scarce.—*J. B. O. Legendre, 1883.*

- 22. Outlines.**—West, undulating and rolling prairie. Soil, sandy loam, about 6 inches deep, with a clay subsoil. Class 2. Very little water along the line. North, Sections 31 to 36 are rolling. Loam soil, from 3 to 5 inches deep. Clay subsoil. Class 2. Very little water. *E. J. Rainboth, 1882.*

Gently-rolling prairie, with a good soil along the east boundary.—*E. Bray, 1882.*

Sub-division.—All rolling prairie. Soil, class 2; sandy loam, with clay subsoil; only fair for farming. There are a few alkaline ponds scattered throughout, but water, generally, is scarce, and vegetation stunted. A large marshy tract in the south-east.—*J. B. O. Legendre, 1883.*

- 23. Outlines.**—The south boundary was surveyed over rolling prairie, with a loam soil, from 3 to 5 inches deep, with a clay subsoil. Class 2. Water scarce. The west boundary was surveyed over undulating, rolling and hilly prairie, with soil generally of sand loam, about 4 inches deep, with a clay subsoil. Class 2. Very little water.—*G. C. Rainboth, 1882.*

Along the east boundary the land is high, undulating prairie, of first quality, and ascends towards the north.—*T. Kains, 1882.*

Sub-division.—Rolling prairie, broken by ravines, which, in spring, have running creeks. Soil throughout the township is a sandy loam, with clay subsoil. Class 2, but very dry and unfit for farming, the grass not attaining a greater height than 1 to 2 inches. There is no wood.—*J. B. O. Legendre, 1883.*

- 24. Outlines.**—Devil's Lake is situated in the north-east part of this township and extends eastward in Range 8. It is 6 miles long and $2\frac{1}{2}$ to 3 miles wide; several small streams of good water flow into it, but the lake water is unfit for use, having a most disagreeable taste and smell. Soil, first quality, along the northern sections. Southwards from Devil's Lake the land is high, undulating prairie, and of first quality.—*T. Kains, 1882.*

West, rolling and undulating prairie. Alluvial soil, from 3 to 5 inches deep, on marshy clay and sandy subsoil. Class 2. Sections 6 and 7 are an alkaline flat. Water in marshes.—*G. C. Rainboth, 1882.*

Sub-division.—Rolling prairie. Soil, a sandy loam, about 10 inches deep, on a clay subsoil. Class 2. Sections 4 and 35 contain the only marshes of any size. There is a large alkaline lake in the north-east of the township, covering Sections 24 and 25 and portions of the surrounding sections. It is called Devil's Lake, and towards it there flow a number of creeks in coulées. Many of these creeks dry up as the season advances. An old trail crosses to the north of the lake.—*J. B. O. Legendre, 1883.*

- 25. Outlines.**—West, surface rolling. Soil generally very light and gravelly, with good grass on it. There are some flats of clay loam, but they are very stony. Few meadows or ponds.—*W. Ogilvie*, 1881.

Southwards the soil is first quality, sloping towards the shores of Devil's Lake, in Township 24.—*T. Kains*, 1882.

Sub-division.—Soil, sand loam and clay loam, on sand and clay subsoil. Is very rolling, especially northwards; but the southern tier of sections are less so. The Eagle Hills skirt the second tier of sections. A small quantity of poplar, soft maple and willows can be obtained in some of the coulees formed by the hills, fit only for fuel. In the north the township is well dotted with lakes and marshes, but dryer in the south.—*J. Burke*, 1883.

- 26. Outlines.**—East, hilly prairie, hills from 5 to 150 feet high, average height is about 70 feet. Soil is a light sandy loam, gravel in places about 6 inches deep, with a sand or gravel subsoil. Class 2. In Sections 12 and 13 the line crosses a lake, the water of which is clear and deep, and in Section 1 a small creek flowing east. Several other ponds and marshes. The western part is also hilly, with numerous ponds among the hills. Soil, sandy loam, 5 inches deep, on a sandy subsoil Class 3. This township, generally, is capital for pasturage, but too rough for agricultural purposes.—*J. A. Maddock*, 1883.

The north is rolling, except where intersected in the north-east by a valley, and in the north-west by a couple of valleys. In one of the latter a creek flows northwards. The soil is very fair.—*M. Deane*, 1884.

Sub-division.—Very hilly, but not many lakes and marshes. Soil rather light, but in some places a good clay subsoil may be found.—*J. Burke*, 1883.

- 27. Outlines.**—The eastern part is rolling prairie. Soil, sandy loam about 6 inches deep, with sand subsoil. Class 2. The east line crosses Red Deer Lake, which is about 36 chains wide, in Section 25. The water is deep, and slightly alkaline. South of the lake is a valley, about 200 feet deep, with ash and poplar growing on the sides. In Section 12 is another valley, about 150 feet deep, containing ash and poplar also. The west is rolling prairie. Soil is a sandy loam, about 5 inches deep, with a sand or clay subsoil. Classes 2 and 3. Water scarce.—*J. A. Maddock*, 1883.

Sub-division.—The land is tolerably good. The surface formation is alluvial, and generally composed of a sandy soil and subsoil. There is no general distribution of timber, but on the south-west margin of Red Deer Lake there is a heavy growth of small poplar and thick brush. Good water is scarce, and to be had only in Red Deer Lake; but this, in summer, becomes stagnant, and considerably impregnated with alkali. A valley, which is one mile wide, in Section 6, trends to Red Deer Lake in a wedge-like form, and in its widest part there is a long narrow marsh. Along the bed of this valley there flows a small creek.—*M. Deane*, 1884.

28. Outlines.—In the north-east corner is a deep ravine, jagged and broken, and in places clothed with timber, the latter mostly poplar and white ash, with scrub. A small creek of alkaline water (bearing south-east to the Saskatchewan) flows in the bottom of the ravine. The surface of this township may be called hilly and undulating. The soil is principally a good clay loam, with clay subsoil, and is well adapted for all purposes of farming. Water is abundant in muskegs and ponds, and, for the most part, is fresh.—*T. Fawcett*, 1883.

West, hilly and rolling prairie. Soil, clay loam, 5 inches deep, on a clay subsoil. Class 3. Red Deer Lake lies in a valley 150 feet deep in Section 12. East, broken prairie. Soil, black and sandy loam, about 6 inches deep, with clay subsoil. Classes 1 and 2. A couple of ravines, from 75 to 125 feet deep, and containing ash and poplar trees, were crossed in Section 36. Very little water along this line. Soil, a good clay loam to the north and a sandy loam to the south.—*J. A. Maddock*, 1883.

Sub-division.—The land in this township is open prairie, of fair quality. The surface is undulating and elevated. The soil is fertile, and composed of a sandy loam. There is no wood, except some patches of small poplars, brush and scrub, on the southern margin of Red Deer Lake. Water is scarce, except in the lake valley, where, in summer, it is stagnant and strongly alkaline.—*M. Deane*, 1884.

29. Outlines.—Southwards, rolling and undulating prairie. Soil, rich clay and dark loams, of 10 inches, on subsoil of clay; mostly class 1. The surface is well dotted with small marshes. Section 36 is crossed by an alkaline creek and cart trail.—*T. Fawcett*, 1883.

Westwards, it is rolling prairie, with a clay loam 6 inches deep, on a clay subsoil; class 2. There is very little water. Eastwards, it is undulating prairie. Soil, sandy loam, 6 inches deep, with a sand subsoil; class 2. No water along this line.—*J. A. Maddock*, 1883.

Sub-division.—This township may be classed, as many other neighboring townships, as tolerably good. The soil, generally, is sandy loam on a sandy subsoil. There is no timber, and water is scarce. There are no indications of coal or other minerals.—*M. Deane*, 1884.

30. Outlines.—The east is undulating and rolling. Soil, sandy loam, about 6 inches deep, on a sand and clay subsoil; classes 2 and 3. Sections 12 and 13 may be called first class. The west is rolling and level prairie. Soil is sand and clay loam, about 6 inches deep, with a clay and sand subsoil; class 2. A little water was found along the line in marshes.—*J. A. Maddock*, 1883.

Sub-division.—The land in this township is all prairie, and, in some respects, better than the surrounding townships, being composed generally of a sandy loam soil on a clay subsoil. There is no timber or minerals, and water is scarce. The only lake is in Sections 25 and 36.—*M. Deane*, 1884.

31. Outlines.—Sections 6, 7, 18, 19, 30 and 31 are in a rolling country, broken in places into sand knolls, that are generally covered with

a thick growth of small bushes. The soil is light and sandy, and fourth class. Sections 1, 12, 13, 24, 25 and 36 are in a rolling to knolly country, with a sandy loam soil, generally second class.—*F. W. Wilkins, 1883.*

Sub-division.—Surface, generally rolling prairie, with a few sand hills in north-western portion. It is covered with a small growth of poplar and willow. Soil, in the northern and north-western portions principally sandy loam, 12 to 14 inches deep, with subsoil chiefly clay, but occasionally sand. On the first row of sections south of the northern boundary the land is class 3. The rest is class 2, except in one or two places over towards the western limits. The land improves towards the south and east. In the southern and eastern portions the soil consists of clay loam, 12 to 14 inches deep, with clay subsoil. Class 2. A portion of Section 6 is class 3, being sandy loam over gravel. This township would be admirably adapted to mixed husbandry, were it not for its limited supply of pure water. A cart trail crosses the north boundary of Section 20 at 64.24 chains from the eastern limit of that section. Another crosses the east boundary of Section 29, near the half-mile mound; another passes near the north-east corner of Section 19; and a fourth near the north-east corner of Section 27.—*C. E. Towle, 1884.*

- 32.** *Outlines.*—Sections 31 to 36 are slightly rolling land, and the soil is of a very superior quality.—*E. Bray, 1883.*

West, rolling country, broken in places into sand knolls, that are generally covered with a thick growth of small bushes. The soil is light and sandy. Fourth class. The east boundary was surveyed over a rolling to knolly country, with a little small wood in places, and having light sandy soil, generally. Third and fourth class, excepting Section 36, which is first class.—*F. W. Wilkins, 1883.*

Sub-division.—Rolling country, varied with sand hills in the south-western parts, which are covered with a small growth of poplar and willow. The soil in the western and south-western portions consists of sandy loam, about 14 inches deep, with sandy subsoil. Rated, generally, class 3. In the other parts of the township the surface soil is the same, but the subsoil is of clay, and the land is rated class 2. The land is very dry, and pure water hard to find. On Section 15, about 26 chains from the east boundary, is a small lake, which, like nearly all the other ponds, is alkaline.—*C. E. Towle, 1884.*

- 33.** *Outlines.*—South, slightly rolling land, and the soil is of a very superior quality.—*E. Bray, 1883.*

Sections 31 to 36 are open prairie, with clay loam soil; mostly first class. A very small spring creek is crossed in Section 33, with quite a deep valley; course, northerly. The west boundary lies along open, rolling prairie, with clay loam soil; class 1 throughout. East, open, rolling prairie. Soil, clay loam, and first class throughout.—*F. W. Wilkins, 1883.*

Sub-division.—Rolling prairie; soil, sandy loam, about 12 inches in depth, with clay subsoil. About two-thirds, from the

eastern boundary westward, is rated class 2, and the remaining one-third, on the west side, class 3. The western half is well watered. Portions of Sections 16, 17 and 21 are occupied by a lake, very irregular in form, about 3 miles in length, with an average width of something under 1 mile. On the line between Sections 4 and 5 is a large floating marsh, extending northward, from 15.00 chains to 71.50 chains, and occupying a large proportion of each two sections. The water around the marsh is good. The eastern portion of the township is dry. Along the line, between Sections 19 and 30, is a considerable extent of inferior marshy land, rated class 3. On the whole, the land is well suited either to agriculture or grazing. The quality of the grass is excellent.—*C. E. Towle, 1884.*

- 34. Outlines.**—East, open, rolling prairie. Sections 1, 12 and south half of 13 are first class, with clay loam soil. Balance of this line is second and third class, with sandy loam soil. A small spring creek, having quite a deep valley, flows in Section 24, course north-east. Sections 1 to 6 consist of open prairie, with a clay loam soil; mostly first class. A very small creek crosses Section 4, in a deep gully; course, northerly. Sections 6, 7, 18, 19, 30 and 31 are open, rolling prairie, with a clay loam soil; class 1 throughout.—*F. W. Wilkins, 1883.*

Sub-division.—Rolling prairie. Soil sandy loam, 12 to 14 inches in depth, with clay subsoil; rated class 2. Well watered in the easterly portion by a creek which runs diagonally across the township. There is an abundant supply of grass, and, taken as a whole, it is well-suited both for tillage and pasture land.—*C. E. Towle, 1884.*

- 35. Outlines.**—The west generally, is open, rolling prairie. Soil, generally clay loam, with some sandy loam. Classed 1 and 2. The east is hilly prairie in general, with clay and sandy loam soil, mostly first class, and some second and third. A number of dry water courses and a small spring creek cross the line with an easterly course.—*F. W. Wilkins, 1883.*

Sub-division.—Is a dry rolling, prairie, with black loam and sandy loam soils. Classes 1 to 3. No wood, and water is scarce.—*C. A. Lett, 1884.*

- 36 Outlines.**—The western sections are open, rolling prairie, excepting the north half of Section 31, on which some wood, poplar, up to 8 inches, was found. The soil on Section 31 is light, and classed 3. The balance of the line is class 1. Open, rolling prairie, along the east boundary with clay and sandy loam soils; generally 1st and 2nd class. A few good sized fresh-water marshes were found in the vicinity.—*F. W. Wilkins, 1883.*

The soil of the northern sections is heavy black loam; water good and fresh; scattered clumps of small 6-inch poplar.—*W. A. Ashe, 1882.*

Sub-division.—The greater part is rolling prairie, with scrub on the westerly tier of sections. There is no bush, and water is scarce. The soil is very good, being chiefly a sandy loam; class 1.—*C. A. Lett, 1884.*

- 37¹₂** *Outlines.*—The north-eastern part is hilly. The soil is second and third class. In the south-western part the soil improves, and is first class. The north and north-western part is timbered with clumps and belts of poplar, 2 to 5 inches in diameter. Brulés frequent.—*A. G. Cavana*, 1883.

The soil southwards, is heavy, black, loam. Water good and fresh. Scattered clumps of small 6-inch poplar.—*W. A. Ashe*, 1882.

Sub-division.—One-half of this township is taken up by a large belt of timber, which lies in a north-westerly direction. There is also some timber on the north-east corner. Where the timber grows the soil is poor and sandy. The rest of the township has a sandy loam soil of good quality.—*C. A. Lett*, 1884.

- 38.1** *Outlines.*—A survey of the east and west boundaries shows the surface as slightly rolling. Shallow sloughs are numerous, and are bordered with small willow. A belt of timber about a mile wide extends across the south end of the township. The soil is rated first class.—*A. G. Cavana*, 1883.

South, prairie, with poplar bush and thick willows. Trail crosses the line in Section 6.—*C. A. Lett*, 1884.

Sub-division.—Rolling prairie; soils, various, are black loam or a light sandy loam, with a sandy clay or sand subsoil. The south-west is wooded with poplars varying from 1 to 8 inches in diameter. Some of these poplars may be used for building purposes. A small creek of good water crosses Sections 32, 30, 29, 20, 17, 16 and 9. The soil classes 2, 3 and 4.—*F. Vincent*, 1884.

- 39.** *Outlines.*—A survey of the east and west boundaries shows the surface as rolling. The soil throughout is first class, excepting a sandy strip adjoining the north bank of the Saskatchewan River, which is second class. The river crosses the township in an easterly direction, with the usual belt of timber along its banks. A part of the township north of the river is thickly dotted with clumps of small poplar.—*A. G. Cavana*, 1883.

Sub-division.—The portion lying south of the Saskatchewan River, which embraces the two southerly tiers of sections, is level and rolling prairie, and much more open than on the north side of the river. There are occasional bluffs of wood along the river, and also some small wood in the east. The trail from Carlton to Battleford is close to the south shore, and the telegraph line crosses the south-west sections, through which also a small creek flows to the river.—*F. Vincent*, 1884.

The portion lying north of the Saskatchewan River being rather more than half, is, as a whole, unfit for cultivation, being sandy and poor. In many places there are sand hills and drifting sand without sod, and here and there only cactus, creeping juniper and scrub cedar. This portion is, comparatively speaking, well timbered, as numerous bluffs of greater or less extent grow in the valleys between the hills. The timber is chiefly suitable for firewood, and only in a few places are rails or building logs to be obtained. Along the river front is a broad marshy flat,

subject to overflow. A creek follows the north sections.—*R. Laurie*, 1883.

40. *Outlines*.—The north is somewhat rolling, and dry. The soil is light, and some bluffs of poplar and willow occur on the western portion.—*G. B. Abrey*, 1882.

A survey of the east and west boundaries shows the soil in the western part of the township as a sandy loam and second class. The eastern part is rated first class. The surface is rolling, and throughout is thickly dotted with clumps of poplar, some of a suitable size for building purposes, firewood or rails.—*A. G. Cavana*, 1883.

Sub-division.—This is a good township, most of the soil being a black loam and class 1. The southern half is thickly wooded with poplar of a small size, only a few being large enough for building logs. Well watered with small ponds and a creek of excellent water, following the south boundary with an eastward flow. A large lake lies in the south-west and in this vicinity is a large area of hay land. In the north the greater portion of several sections is hay land.—*R. Laurie*, 1883.

41. *Outlines*.—The south is slightly rolling, with dry sandy soil; some poplar and willow to the west.—*G. B. Abrey*, 1882.

West, level prairie. A few clear water ponds were crossed by this line. First class prairie land. The east is first class prairie, slightly stony in places.—*J. K. McLean*, 1883.

42. *Outlines*.—East, first class prairie, slightly stony in places, with numerous bluffs of small poplar, and willow scrub, and continues so to Red Berry Lake, a large lake crossing Section 36. The water of this lake is alkaline. Along the west the soil is first class. There is a considerable amount of poplar and willow scrub. Creeks in Sections 7, 30 and 31.—*J. K. McLean*, 1883.

43. *Outlines*.—Redberry Lake extends over Sections 1, 12, 13 and part of 24. Remaining sections are high and rolling prairie; with poplar and willow bluffs. In Section 36, a part of Raspberry Lake is again crossed.—*J. I. Dufresne*, 1884.

This township is rolling country with good sandy loam soil, and bluffs of small dry poplars. The bluffs are larger and more numerous in the western part than in the eastern part. Redberry Lake extends over a considerable portion of this township; it is met in Section 24 and extends over three miles in the west. The water of this lake is not drinkable. A creek, 25 links wide, running into the lake, was met in Section 24. In Section 6 a creek, flowing south-east, crosses the line. Pitt and Carlton trail was crossed in Section 19. Several bodies of clear water were crossed.—*J. I. Dufresne*, 1884.

44. *Outlines*.—Along the north boundary the soil is generally of a high average; consisting of an excellent sandy loam, with poplar for building, fencing and fuel. Good water.—*W. A. Ashe*, 1883.

East, hilly and rolling. Small bluffs of poplar and willow. Pitt and Carlton trail crosses the line in Section 1. In 24 the line crosses a creek. Numerous clear water ponds and sloughs. West,

rolling prairie. Small burnt poplar. Large lake covers Section 6. In Sections 30 and 19 a small creek was crossed, which flows southward to Redberry Lake. Another creek flows south to the same lake down the centre of the township—*J. I. Dufresne*, 1884.

- 45. Outlines.**—The soil along the south, is generally excellent sandy loam, with clay subsoil, and having a fair supply of poplar for building, fencing and fuel; also good water.—*W. A. Ashe*, 1883.

West, rolling and undulating prairie, with burnt bushes, small poplars and willows. A large marsh was crossed in Section 6. East, rolling prairie, with poplars and willows. Numerous clear-water ponds were crossed. Carlton and Jack Fish Lake trail crosses the line from Section 1 to Section 19.—*J. I. Dufresne*, 1884.

- 46. Outlines.**—West, gently-rolling, with burnt poplars and willows. Creek flowing south-east was crossed in Section 31. East, rolling prairie. Sections 1 and 12 have poplars and willows; remainder of line is poplar and willow *brulé*. Clear-water ponds are numerous.—*J. I. Dufresne*, 1884.

North, hilly; and hilly and rocky in the north-west, and rolling in the centre and east. The surface covered with poplar scrub, trees and a few birch, and broken by a good number of lakes, swamps and muskegs. Soils, black loam, black sandy loam, and sandy loam; classes 2 and 3. There are several small creeks. Generally, the soil is poor, and ranks as second class. The country is very rough, the line crossing the Thickwood Hills, and is all solid timber, some of it being very fair spruce.—*T. Drummond*, 1883.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE X.

7. *Outlines*.—Rolling prairie, with ridges in places about 30 feet high. Soil, sandy loam, about 6 inches deep, sand and clay subsoil. Class 2. The south branch of Old Wives' Creek crosses the east line in Section 36; another creek crosses in 13. The water in these creeks is in pools, and is strongly alkaline.—*A. O. Wheeler*, 1883.

The northern sections are rolling and undulating. Soil, clay loam, from 18 to 24 inches deep, with clay subsoil. Classes 1 and 2. Section 32 is stony on the ridges. Sections 35 and 36 are second and third class, being an alkaline flat. Would make excellent pasturage. A marshy creek flows south across the line in Section 35.—*T. Fawcett*, 1882.

8. *Outlines*.—Easterly sections, rolling. Soil, sandy loam, 3 to 6 inches, on sand, clay and gravel subsoils; classes 2 and 3. Sections 12 and 13 are very stony. Class 4. The banks of the ravine are from 35 to 40 feet high; the ridges from 20 to 30 feet. Cart trail crosses Section 1. The township is hilly and stony in the centre, otherwise rolling very heavily, with loose stones and gravel on the ridges. The soil is poor, being sandy loam, with subsoil of clay and sand or gravel. Classes 3 and 4.—*A. O. Wheeler*, 1883.

9. *Outlines*.—In Section 4 an alkaline drainage-course trends towards the south-east, and probably joins the eastern branch of Old Wives' Creek. Piles of driftsand and clay are found along the flat, giving proofs of recent flooding. The remainder of the township gradually ascends. Section 2 is excellent pasturage. The southern sections are rolling and undulating. Soil, clay loam, 18 inches deep, on clay subsoil. Classes 1 and 2. Section 5 has stony ridges. Sections 1 and 2 are classes 2 and 3.—*T. Fawcett*, 1882.

The east boundary is rolling prairie. Soil, sandy, 3 to 6 inches deep, with clay subsoil; class 2. The line crosses several ridges, ranging from 10 to 30 feet high. Very little water.—*A. O. Wheeler*, 1883.

10. *Outlines*.—Heavily-rolling prairie, with gravel and stones on most of the ridges. The main branch of Old Wives' Creek flows through the north-west portion. Country very dry, and the soil a sandy loam, with clay subsoil. Class 2. Rolling prairie. Soil, sandy loam, from 2 to 8 inches deep, with a clay subsoil. Class 2. The Fort Walsh and Qu'Appelle trail crosses the northerly sections.—*A. O. Wheeler*, 1883.

11. *Outlines*.—The west is rolling prairie. There are two creeks in this township, branches of Old Wives' Creek, but at the time of the survey there were only a few pools to mark their course. In the south part is a good sized lake. The soil is clay. The east is gently-rolling prairie, with a few dry sloughs. The soil is a bare clay.—*A. F. Cotton*, 1883.

- 12. Outlines.**—The east boundary runs over hilly prairie, broken by ravines, in some of which there is a little quantity of small maple. Water is very scarce. The soil is a clay loam. Along the west it is hilly and broken. The soil is a clay loam, with little or no grass, and about 8 inches deep, on clay subsoil. Class 3. No water along this line.—*A. F. Cotton*, 1883.

The north country is somewhat hilly and broken by ridges; soil varies from sandy to clay loam, on a clay subsoil. Water mostly alkaline.—*W. T. Thompson*, 1882.

Outlines.—This township is generally hilly, with numerous alkaline ponds and flats. Third class. North; rolling and hilly. East; rolling prairie. Alluvial soil, from 5 to 10 inches deep, with clay subsoil. Class 3. Section 36 is stony in places. No water. In Section 25 an alkali creek crosses the east line, flowing north-east. At the time of survey it was nearly dry, with banks 20 feet high.—*J. K. McLean*, 1882.

West, undulating. Soil about 6 inches; clay subsoil. Class 3. A couple of stagnant creeks, one in Section 19, the other in 31. Very little water.—*J. J. McArthur*, 1882.

The southerly sections are somewhat hilly and broken by ridges. Soil, sandy to clay loam, usually on a clay subsoil. Water alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Old Wives' Creek valley traverses this township two miles from the north boundary; it contains in summer, only a succession of pools, from 3 to 4 feet deep. A peculiar valley extends from the creek in Section 20 across Sections 17, 9, 10, 11 and 2, with very abrupt and broken sides to the south and west. Beds of sandstone are exposed in the south sides of this valley. Many of the gullies are full of scrub and brush, and springs of water abound. Soil, classes 2 and 3.—*W. Chipman*, 1883.

- 14. Outlines.**—Generally hilly, with numerous alkaline ponds and flats; third class. The north and west are rolling prairie. Alluvial soil, from 6 to 10 inches, with clay subsoil; class 3. A large alkaline lake in Section 36, and a couple of marshes and a stagnant creek on the west boundary. No water southwards. Section 1 is stony also the north of 24.—*J. K. McLean*, 1882.

Sub-division.—Rolling prairie high in centre, with descent to all sides. Soil, clay, sandy and gravelly loams; classes 2 and 3. No wood, and water scarce. Grass, short and scrubby in dry seasons. Ponds and marshes, few.—*W. Chipman*, 1883.

- 15. Outlines.**—Surveyed all the boundaries, and find the general features of the township to be hilly, with numerous alkaline ponds and flats. The soil usually lies 5 to 10 inches deep, on a clay subsoil. In the western part it may be rated second class, but elsewhere it is not above third class. The surface of the north and east is rolling and hilly, while the south and west is rolling only. Sections 13, 30, 31 and 32 have small creeks flowing across them; one of these is salt. Sections 35 and 36 are, to some extent, alkali flats, and contain some large alkali ponds. There are also alkali

flats in Sections 30 and 31. The south and west are very dry, no water being seen at the time of survey.—*J. K. McLean*, 1883.

Sub-division.—Rolling prairie; soil, sandy loam on sandy subsoil; class 2. A large alkaline lake covers Sections 1, 2, 11, 12 and 14. No wood, and water scarce. A poor township for agricultural purposes.—*P. C. Talbot*, 1883.

- 16. Outlines**.—Northwards the surface becomes more undulating and the soil more friable than the eastern range. The line passes over Rush Lake, near its southern end. Sections 34 and 33 fall in the lake. The banks of the lake in several places are very steep and jagged. The waters are alkaline, but not so salty as the lakes passed to the east.—*T. Fawcett*, 1882.

South, hilly with numerous alkaline ponds and flats. Third class. West, rolling, hilly and level. East, rolling and hilly. Alluvial soil, from 7 to 10 inches deep, with clay subsoil. Classes 2 and 3. Section 36 is much broken by ridges from 20 to 30 feet high, and alkaline ponds about 2 feet deep. A few grass marshes containing fresh water. Sections 1 and 2 are an alkali clay flat, class 3, and very wet.—*J. K. McLean*, 1882.

Sub-division.—Rolling prairie; soil, sandy loam on sandy and gravelly subsoil. Classes 2 and 3. A few of the marshes contain good water, but numbers of them dry up during the hot weather. There is no wood. The township is not well adapted for settlement. The west half is much drier than the east half. Rush Lake lies on the north boundary.—*H. H. Robertson*, 1883.

- 17. Outlines**.—The north boundary crosses, in Section 31, an arm of Handsome Lake, and is open rolling prairie. Soil, along to Section 36 is generally a fair sandy loam; class 2. Section 36 is clay loam and hard clay; class 2. The east boundary is in open gently-rolling prairie across Sections 1 and 12, with fair sandy loam soil; class 2. Sections 13 and 24, very hilly prairie, broken up by a good many ponds, some fresh and some saline. Soil, a sandy loam; class 3. Section 25, gently-rolling prairie, sandy clay soil; class 2; and Section 36, a very level hard clay plain; class 3. The west boundary is open, rolling prairie, with a sandy loam soil and subsoil; class 2. Rush Lake extends over the greater part of the south-west. The Canadian Pacific Railway runs just north of the lake. Cypress trail crosses the line in Section 18, and the trail to Red Deer Forks in 19. Sections 30 and 31 are stony in places.—*F. W. Wilkins*, 1882.

Along the south the surface is more undulating, and the soil more friable than in the range adjoining eastwards. Rush Lake covers the south-west sections. The banks of the lake in several places are very steep and jagged. The waters are alkaline, but less so than the lakes passed to the east.—*T. Fawcett*, 1882.

Sub-division.—Rolling, and in some places hilly. Soil, clay loam or clay, on clay subsoil; classes 2 and 3. Water abundant. Many lakes and ponds occupy the north; and Rush Lake—alkaline—covers the south-west quarter. There are a good many soft-water marshes. The C.P.R. crosses the township.—*J. J. McKenna*, 1883.

18. *Outlines*.—Northwards, rolling. Soil, clay loam, with loam subsoil. Class 1. Stony in places. Carlton and Fort Walsh trail crosses from Section 5 to Section 35, and trail to the north crossing of Swift Current Creek, Section 33 to Section 30. Very little water. Southwards, undulating and rolling. Soil, sandy loam, about 3 inches deep, with loam and gravel subsoil. Class 2. Handsome Lake was crossed in Section 6. East of the lake the land is stony and gravelly in places. Several marshes on the line. West, rolling prairie. Soil is a clay loam, with a clay loam subsoil. Class 1. Section 19 is stony in places. Numerous lakes on the line. The east boundary is an open, rolling prairie. Soil, except the south half Section 36, which is hard clay, is a fair sandy loam. Class 3.—*F. W. Wilkins*, 1882.

Sub-division.—Rolling and hilly. Soil, generally clay loam or clay. Classes 2 and 3. There are three lakes in the west half, and a portion of Handsome Lake. All the lakes except one are alkaline. There are very few marshes in the township having water in them. A cart trail crosses the township.—*J. J. McKenna*, 1883.

19. *Outlines*.—South, soil, clay loam, with loam subsoil. Class 1. Stony in places. Carlton and Fort Walsh trail in Section 2, and the trail to the north crossing of Swift Current Creek in Section 4. Both cross the township, and converge on a point east of Section 13. Very little water. West, soil and subsoil clay. Class 3. Section 30 very much broken, and very little water along the whole line. East, soil clay loam, with loam subsoil. Classes 1 and 2. All the surface on boundaries is rolling prairie.—*F. W. Wilkins*, 1882.

Sub-division.—This township is a rolling prairie, with the exception of a track of from 5 to 60 chains wide along the north boundary, which is a portion of the Saskatchewan Valley, and is covered with clumps of scrub and small poplar, and cut by ravines which run into the valley. There is a small lake and some marshes and ponds scattered throughout. The soil is a clay loam or clay, with a clay subsoil; nearly all classes 2 and 3.—*J. J. McKenna*, 1883.

20. *Outlines*.—North, Section 36 is very rough, but the balance of the range is composed of land of fair quality, and embraces Sections 31 to 35.—*E. Bray*, 1882.

West, rough, hilly and broken; stony in places. Soil and subsoil, clay. Class 4. South Saskatchewan River was crossed in Section 18. Section 6 is open, undulating prairie. Soil, clay loam, 12 inches deep, with clay subsoil. Class 1. Small poplars and brush, together with some ash woods, were seen along the line. East, Section 1 and part of 12 is open, gently-undulating prairie; soil, excellent sandy loam. Class 1. The balance of the line is in the ravines and valleys of the South Saskatchewan River, and is so broken and rough as to be totally unfit for farming purposes, except in small patches immediately along the river bank. Soil, a heavy clay. Class 3. A good deal of wood did exist in the ravines opening into the valley of the river, but at the time of survey a heavy prairie fire destroyed most of it.

The river is crossed in Sections 25 and 36. It is about one-third of a mile wide, and full of sand bars.—*F. W. Wilkins*, 1882.

Southerly sections hilly and rough, having deep ravines, with poplar and brush scattered over the surface. Clay and clay loam soil, with clay subsoil. Class 3. Very little water.—*J. J. McKenna*, 1883.

Sub-division.—Very rough, and broken by the River Saskatchewan, which runs through the central portions. The river has banks from 400 to 450 feet high, broken into and corrugated by ravines and coulées, which, in their turn, are entered by other cross ravines and coulées, some of which extend back from the river 4 or 5 miles. Wood has been abundant in these ravines, but is greatly destroyed by fires. There are about 4 or 5 sections of level prairie on the north side of the river. Soil, sandy loam; class 2. The rest of the township is a stiff, arid clay, unsuitable for cultivation. The river is filled with numerous sandbars, but the channels are still navigable at lowest water for river steamers.—*E. J. Rainboth*, 1883.

- 21.** *Outlines*.—East, undulating and rolling prairie. Soil, a clay and sandy loam, about 6 inches deep, on a clay subsoil. Class 2. In Section 24 Big Coulée was crossed. The banks are of clay, perpendicular in places, and 350 to 400 feet high, with scrub in the ravines. Section 1 is rough and hilly; the soil is sandy and gravelly loam; subsoil marly clay. Class 2. West, undulating and rolling. Soil is sandy loam. Class 2. Section 31 is an alkaline flat.—*G. C. Rainboth*, 1882.

On the south, Section 1 is very rough, but the balance of the range is composed of land of fair quality.—*E. Bray*, 1882.

Sub-division.—This township is rolling and level, but more rolling towards the north portion. Here there are a few small creeks, but in the centre and south there are no signs of running water. The soil is a sandy loam, about 10 inches deep, on a clay subsoil, and generally rates class 2. There is no wood, except in the south-east corner.—*J. B. O. Legendre*, 1883.

- 22.** *Outlines*.—North, rolling. Soil, sand and loam, about 4 inches in depth; the subsoil, sand. Class 2. Small marshes along the line. East, very little water. Surface and soil same as northwards. West, undulating, rolling and hilly prairie. Soil, generally sandy loam, from 3 to 5 inches, with a clay subsoil. Class 2. Sections 6 and 7 are an alkaline flat. Water can be obtained in the marshes along the line.—*G. C. Rainboth*, 1882.

Sub-division.—Rolling prairie. Soil, classes 2 and 3; sandy loam, and partly clay and sandy subsoil. No wood. A few creeks in spring and early summer. South, rolling and level prairie. Soil, sandy loam, about 10 inches deep, with clay subsoil. Class 2. In Sections 1, 4, 5 and 6 the line is crossed by small creeks.—*J. B. O. Legendre*, 1883.

- 23.** *Outlines*.—South, rolling prairie. Soil, sand loam. Class 2. Fresh marshes along the line. East, rolling and hilly. Soil is sand loam, from 4 to 8 inches deep, with sand subsoil. Class 2. No water along this line. West, rolling and hilly prairie, with num-

erous ponds among the hills. Soil, classes 2 and 3. The hills vary from 20 to 100 feet in height.—*E. J. Rainboth*, 1882.

Sub-division.—Rolling prairie; soil, class 2; a sandy loam and clay subsoil. Swamps and ponds—a large proportion of good water—are evenly scattered throughout. Several creeks with good water pass through the township.—*J. B. O. Legendre*, 1883.

- 24. Outlines**.—The country across the north of this township is second class, and consists of rough, hilly prairie, with numerous high knolls, and a plentiful supply of ponds and grass swamps. No wood.—*T. Kains*, 1882.

East, generally rolling prairie. Soil, from 3 to 5 inches, on a sandy and marly clay subsoil. Class 2. Sections 1 and 12 are an alkaline flat. West, rolling prairie, except Section 18, which is rather hilly. Subsoil is loam. Class 3. The surface is broken by numerous ponds and marshes.—*E. J. Rainboth*, 1882.

Sub-division.—This township consists, in the north-west half, of broken and, in places, hilly prairie, having a number of marshes, ponds and lakes, occasioned by its being at the foot of the Coteau, which lies to the north and the west. There is a large alkaline lake in this portion, of probably 1,500 acres. The south-east half is more rolling, level and dry. There is no wood to be seen.—*J. B. O. Legendre*, 1883.

- 25. Outlines**.—The southern sections are second class. Rough, hilly prairie, with a plentiful supply of ponds and grass swamps. A range of high hills runs parallel with these sections to the east side of Devil's Lake, in Ranges 8 and 9, where it turns north-east. These hills are from 120 to 150 feet high, and wood grows in the the numerous ravines. After leaving these hills no timber of any description was met with, until we reached the South Saskatchewan River, on the meridian between Ranges 20 and 21.—*T. Kains*, 1882.

East, broken and hilly prairie, the hills being from 50 to 150 feet high. Soil is sandy loam, about 6 inches deep, with sand subsoil. Class 2. Water can be obtained in marshes. West, hilly prairie, the hills ranging from 50 to 150 feet in height. There are numerous deep lakelets among the hills, containing good water. The soil is a sandy loam, about 6 inches deep, with a sand subsoil. Class 2.—*J. A. Maddock*, 1883.

Sub-division.—The surface is very hilly and there are many lakes and marshes, the former being usually alkaline and the latter fresh water. The soil is generally very good, much of it a black loam and sandy loam, on clay subsoil. No wood.—*J. Burke*, 1883.

- 26. Outlines**.—East, hilly prairie, with numerous ponds among the hills. Soil is sandy loam, about 6 inches deep, with sand subsoil. Class 3. The hills range from 50 to 150 feet in height. In the west it is rolling prairie. Soil similar to the east. Some marshes about Sections 18 and 19, but less elsewhere.—*J. A. Maddock*, 1883.

Sub-division.—On the south it is similar to, and in surface features a continuation of, Township 25. In the north-west

quarter it is almost level, and is dry, except a large marsh on Sections 19 and 30. There is a good clay subsoil throughout, and a good many gravelly ridges, especially in the south-east. No wood.—*J. Burke, 1883.*

27. Outlines.—South, open prairie. Water scarce.—*J. Burke, 1883.*

Is heavily rolling prairie. Soil, a sandy loam, with the exception of a band 2 miles wide, through the centre of the township, which is a good clay loam, with clay subsoil. The east is rolling. Soil is a sandy loam, from 4 to 6 inches deep, on a sand subsoil. Classes 2 and 3. No water. The west is heavily-rolling. Soil, sandy loam. Class 3. Large marsh was crossed in Section 30.—*J. A. Maddock, 1883.*

28. Outlines.—Is rolling and broken prairie to the north, and level prairie down to the valley of the Red Deer Lake, which crosses the township from east to west at its southern end. The valley is about 150 deep and a mile wide, and the south bank is well wooded with small poplar, saskatoon, &c, where the eastern boundary crosses it, and to the east. South of the lake the prairie is rolling. Soil, a good clay loam north of the lake and sandy loam to the south of it. In places round the lake it is gravelly, and the surface covered with boulders of gneiss and limestone.—*J. A. Maddock, 1883.*

Generally level prairie towards the north, with a dark clay loam soil of 10 inches. Class 1. An abundance of good marshes north-westwards and excellent pasturage, and dryer and good farming land eastwards.—*T. Fawcett, 1883.*

29. Outlines.—East, rolling prairie. Soil, clay loam, about 6 inches deep, with clay subsoil; class 2. Very little water along this line. West, rolling and undulating prairie. Soil, clay loam; class 2. A small creek, almost dry, crosses the line in Section 31. Some boulders show on the surface in this section.—*J. A. Maddock, 1883.*

South, undulating, with a good clay loam soil and clay subsoil, and well adapted for all purposes of farming. Water is plentiful.—*T. Fawcett, 1883.*

30. Outlines.—West, rolling and undulating prairie. Clay loam soil, 6 inches deep, with clay subsoil; class 2. A large ravine crosses the line in Section 6. It is over a mile in width; banks are 60 feet high. East, rolling and level prairie. Soil, sandy and clay loam, 6 inches deep, with a sand and clay subsoil; classes 2 and 3. Water was seen in the sloughs along the line.—*J. A. Maddock, 1883.*

31. Outlines.—The east boundary is in a rolling country, broken, in places, into sand knolls, that are generally covered with a thick growth of small bushes. The soil is light and sandy. Fourth class. The west boundary is an open, rolling prairie. Soil, sandy loam; mostly class 1, with some class 2. A small creek is crossed in Section 31. Course, north-easterly.—*F. W. Wilkins, 1883.*

- 32. Outlines.**—North, slightly rolling land, and the soil is of a very superior quality. A lake, which extends about 5 miles south of the line, is crossed in Sections 33 and 34.—*E. Bray*, 1883.

The east boundary is in a rolling country, broken, in places, into sand knolls; generally covered with a thick growth of small bushes. The soil is light and sandy. Fourth class. West, it is an open, rolling prairie, with sandy loam soil, and classed 1. Sections 7 and 18 on this line lie in Goose Lake. This lake is about 4 miles wide by 5 in length, is apparently very shallow, and, at the time of survey, was literally covered with wild ducks, geese, &c.—*F. W. Wilkins*, 1883.

- 33. Outlines.**—North, is an open, rolling prairie, and, excepting Section 31, has clay soil and is classed 1. Section 31 is almost entirely occupied by the marshy valley of Eagle Creek, which crosses this line near the western limit of this section; the land is class 4. The east is open, rolling prairie, with clay loam soil; class 1 throughout. The west is an open, rolling prairie, generally. Sections 18 and 19 are broken, in places into sandy knolls, having a few bushes growing on them; class 4. Section 1 is classed 1. The balance of line is class 3. Eagle Creek, winding about into a broad, marshy valley, depressed, perhaps, 30 feet below prairie level, is crossed in the western part of Section 31. This stream, at this point, is about 60 feet wide, $2\frac{1}{2}$ feet deep, with a slow, sluggish current, saline water and a very muddy bottom. Course, north-easterly.—*F. W. Wilkins*, 1883.

South, rolling prairie; good soil. In Sections 3 and 4 the northern end of a lake was crossed.—*E. Bray*, 1883.

- 34. Outlines.**—The east boundary is in open, rolling prairie, with clay loam soil; class 1, throughout. The south boundary lies over an open, rolling prairie, and excepting Section 6, is almost entirely occupied by the marshy valley of Eagle Creek, and is class 4. The west boundary is in open, rolling prairie, generally. Section 6, the north half of 19 and the south half of 30, are generally marshy, and classed 3 and 4. The balance of the line is classed 1, and has a sandy loam soil.—*F. W. Wilkins*, 1883.

- 35. Outlines.**—West, open prairie, with clay loam soil, mostly class 1, with some 2 and 4. There is a slow saline creek in a large bog, in the north half of Section 31. The size of the creek was undeterminable; bottom very soft. East, open, rolling prairie. Soil, generally clay loam, with some sandy loam; classes 1 and 2.—*F. W. Wilkins*, 1883.

- 36. Outlines.**—The soil northwards is light, and growing short grass. Water is good and fresh in all rivers and creeks, except Eagle Creek, in which it was slightly alkaline. Some 12 to 18-inch poplar and balm of Gilead (with a few white birch), grow on the steep banks of Eagle Creek, in this township.—*W. A. Ashe*, 1882.

East, open, rolling prairie, excepting the north half of Section 36, on which some wood (poplar, up to 8 inches), was found. The soil on Section 36 is light, and class 3. The balance of the line is class 1. The west boundary lies over a rolling country, generally. Sections 18, 19 and 30, on this line, are classed 1. The north half

of Section 6 and Section 7 are classed 2. The balance of the line is classed 3. A small, saline creek, with an easterly course, is found in Section 1, and is bordered by the same bog. Eagle Creek is crossed twice by this line, on Sections 18 and 19, respectively, and has a slow current, is about 60 feet wide and very deep. A quantity of good firewood (ash, maple and willow), was found on Sections 18 and 19, along the creek, but not elsewhere on this line.—*F. W. Wilkins*, 1883.

- 37. Outlines.**—North, rolling and level prairie. Eagle Hill Creek crosses the line in Sections 32 and 33. A trail was crossed in Section 31. Between Sections 35 and 36 a bluff of timber was seen.—*T. Vincent*, 1884.

Centrally, open prairie; class 2, except where broken by the valley of Eagle Creek, which crosses the township north and south. The water is hard but good, 1 foot deep. A cart trail crosses the township east and west. Section 17 is broken by coulees running into the valley of Eagle Creek. They are about 100 feet deep; water in the bottom, in places.—*J. S. Dennis jun.*, 1878.

East and west, surface slightly rolling. The north-east quarter of the township is timbered with poplar, from 2 to 5 inches in diameter. The balance of the township is entirely destitute of timber, except along the Eagle Creek, which flows across the township in a north-westerly direction. Soil, clay loam, with a clay subsoil. Rated first class.—*A. G. Cavana*, 1883.

The soil is somewhat light in the south. Eagle Creek is slightly alkaline, but the water elsewhere is fresh and good. There is plenty of wood in the valley of the creek.—*W. A. Ashe*, 1882.

Sub-division.—This township is composed of very good land Eagle Creek nearly divides it into two equal portions, east and west. The banks of this creek are nearly 100 feet high, and its valley—which is about 1 mile wide—is timbered with poplar and thick underbrush. The remainder of the township is almost all rolling prairie. A cart trail crosses the township from south-west to north-east, and another crosses the north-west corner.—*C. A. Lett*, 1884.

- 38. Outlines.**—Along the east and west boundaries the surface is slightly rolling. Soil, clay loam, with a clay subsoil. First class. Not timbered, except in coulees and the valley along Eagle Creek, which is usually about 20 chains wide, with banks varying from 80 to 150 feet high. A considerable quantity of timber along the creek is suitable for building purposes, fencing or fuel. This creek has a rapid current, with an average width of 20 feet and 3 feet deep, and it might be utilized for milling purposes.—*A. G. Cavana*, 1883.

Sub-division.—The soil is a good sandy loam, with a sandy subsoil. It is rolling prairie. Eagle Hill Creek crosses Sections 32, 29, 20, 21, 16, 17, 8, 5 and 4. It is about 50 links wide and 6 to 8 inches deep, and runs in a coulée 200 feet deep and half a mile wide. There is no wood in the township, except in this coulée, where there is a small quantity, 1 to 9 inches in diameter,

which is suitable for fuel only. The township may be rated class 2. One trail crosses the township from Section 6 to Section 13, and another crosses Section 31. There are occasional ponds and sloughs scattered about the township. There is some wood in the south-east, but not elsewhere out of the river valley.—*F. Vincent, 1884.*

- 39.** *Outlines.*—The North Saskatchewan River crosses this township in an easterly direction, with the usual half-mile belts of timber along the river. The portion of the township south of the river is open prairie, with a rolling or knolly surface, dotted over with granite and limestone boulders. Part of the township north of the river is thickly dotted with clumps of poplar trees. Some at the western part are suitable for fuel. The soil is first and second class; part clay and part a good sand loam on clay subsoil.—*A. G. Cavana, 1883.*

Sub-division.—Only an average township. A large amount of inferior land lies to the north of the Saskatchewan River, and broken land to the south of it. This river runs across the centre of the township in an easterly direction. A ridge of sand hills crosses the north-east corner, and is well wooded, and there is abundance of rail timber on the south bank of the river and along the valley of Eagle Creek, a tributary of the river from the south, which is alkaline. The middle eastern portion of the township—Sections 22 to 27—is swampy, while much of the same district may be classified as belonging to the “boulder formation.” There is one large lake in the north-east corner, with slightly tainted water, but surrounded with excellent hay lands. Numerous springs of good water are found along the banks of the Saskatchewan and Eagle Creek. The telegraph line and the Battleford trail passes south of the river.—*R. C. Laurie, 1883-84.*

- 40.** *Outlines.*—North, prairie; soil, sandy. All open to the south, but considerable timber seen towards the north, in Township 41.—*G. B. Abrey, 1882.*

The surface of the northern part of the township is level; the southern part is rolling, thickly dotted with clumps of poplar, suitable for fuel or rails. Sloughs are numerous at the northern part of the township. The soil of the western part of the township is first class. The eastern part is a sand loam, occasionally verging into a clay, and rated second and third class.—*A. G. Cavana, 1883.*

Sub-division.—Open, rolling and level prairie, and fairly good, most of the land being first class, except in the north-west, which is rather too low. Between a range of hills northward and the high land southward is a valley containing numerous large lakes and swamps, in the vicinity of which are excellent hay lands. Sections 3 and 4 are sandy. The only timber to be found is in Sections 21, 22 and 3, and this is of small dimensions. The water in the northern lakes is poor, but in the south abundant and excellent. Sections 32 and 33 are submerged—and Sections 31 and 34 partly so—by a large lake extending north of the boundary. There are some small sand hills in the south-east, and a

brulé in Section 3. Two creeks flow east through the eastern half of the township.—*R. C. Laurie*, 1883-84.

41. *Outlines*.—West, first class sand loam soil, as far north as the middle of Section 18, when it becomes very wet, with a great deal of willow scrub, changing, in a short distance, to a very sandy country, with a large quantity of poplar, averaging 8 inches in diameter. A small creek in Section 6. East, level prairie. Few clear-water ponds were crossed by this line.—*J. K. McLean*, 1883.

The southern sections are open prairie, but considerable timber lies north of them. Soil, sandy—*G. B. Abrey*, 1882.

42. *Outlines*.—West, the soil, for agricultural purposes, is chiefly second class. The land is rolling and hilly in places, with numerous poplar bluffs, some being of considerable extent. Several clear-water ponds were crossed. East, the soil is first class, and covered with a heavy growth of poplar bluffs, the timber being from 8 inches to 12 inches in diameter.—*J. K. McLean*, 1883.

43. *Outlines*.—The eastern part is prairie, and bluffs of poplar, with considerable scrub willows. Most of the bluffs are dried poplars, a prairie fire having occurred through this region, very likely two years ago. The north-east corner falls in a large lake of fresh water, about one square mile in area. A nice creek runs from the north into the lake, and then another creek originates in the lake, runs south, and leaves the township through Section 1. The soil is poor in the eastern part, being 2 or 3 inches sandy loam, on a sandy subsoil. The western part appears to be much more open prairie. The character of the country is generally rolling, though broken in places by coulées and creeks. The cart trail to Carlton crosses Section 24.—*J. I. Dufresne*, 1884.

West, undulating prairie. Little bush in Section 6. Scrub found all along the line. Water may be obtained from the sloughs.—*P. R. A. Belanger*, 1884.

44. *Outlines*.—North, the soil is generally of a high average, consisting of an excellent sandy loam, with clay subsoil. Sufficient poplar for building, fencing and fuel, and good water.—*W. A. Ashe*, 1883.

West, rolling and undulating. In Section 19 is a spring, from which a creek runs, and twice crosses the line, flowing south-east finally—*P. R. A. Belanger*, 1884.

Appears to be all rolling country, with good sandy loam soil. Sections 36 and 25 contain bluffs of dry poplars and scrub willows, with small openings of prairie. The rest of the eastern part is half bluffs and half prairie. Poplars are small, generally not larger than 6 inches in diameter, and for the most part dry, a fire having recently occurred. A creek 10 links wide is met in Section 25, and then again in Section 24. This creek runs into a large lake, reported in Township 43, Range 10. Water is good, and in sufficient quantity. The western half appears to be much more open.—*J. I. Dufresne*, 1884.

- 45. Outlines.**—The west forms part of the Thickwood Hills, and is hilly or heavy-rolling prairie, with a considerable quantity of willow scrub. It is considerably broken by marshes, sloughs, ponds and lakes, mostly bordered by willows. A few bluffs of dry wood appear here and there. The east half is more heavily timbered. The soil is a rich clay, or black loam, with clay subsoil. Creek in Section 7. Fort Pitt and Carlton trail in Section 31. Numerous clear-water ponds. Scrub all along the line—*P. R. A. Belanger*, 1884.

The country is gently-rolling, and covered by dry, small poplars, with small openings of prairie. Considerable scrub willows are growing around the numerous marshes and lakes. A lake of fresh water is seen, and estimated to occupy parts of Sections 22, 23, 26 and 27, having a total area of about two square miles. The soil is good sandy loam. A trail running nearly east and west was met with in Section 24. This report is made from the survey of the eastern boundary. In the western part the country appears to be much more open. Cart trail from Jack Fish Lake to Carlton crosses the east line in Section 24.—*J. I. Dufresne*, 1884.

South, excellent sandy loam, with a good supply of wood.—*W. A. Ashe*, 1883.

- 46. Outlines.**—West boundary is all occupied by the Thickwood Hills, and may be called heavy-rolling rather than hilly, as the hills are only from 12 to 20 feet high. It is much broken by hay marshes, ponds, sloughs and lakes, all bordered with willow scrub, so thickly as to give this township the appearance of a timbered country at the distance of a few miles. There are scattered spruces in the north-east half of this township, which also appears to be timbered with poplar. The soil is a rich clay or black loam, with clay subsoil, and ranks first class.—*P. R. A. Belanger*, 1884.

Is gently-rolling, and is covered with dry scrub willows, with some bluffs of small dry poplar. Only small openings of prairie are met. No openings of prairie were met along the east boundary of Section 36 and part of Section 35. Water is abundant, and found in large marshes and small ponds. A few good sized lakes are also seen. The soil is good sandy loam.—*J. I. Dufresne*, 1884.

- 48 Outlines.**—North, the soil is poor in Sections 35 and 36, ranking as 3rd class. The remainder of this range is 4th class. The country is very rough, the line crossing the Thickwood Hills, through a heavy growth of timber. Some of it is very good spruce. The northern sections are rolling country, broken with rocks, small hills, small sloughs and large muskegs, thickly covered with poplar trees and scrub. The soil is a sandy loam, in some places a black loam, and all quite stony. Classes 2, 3 and 4. There are several creeks of good water, with slow currents, and about 1 foot deep (September).—*T. Drummond*, 1883.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XI.

- 9. Outlines.**—Throughout the south the surface slopes towards the north-east. There are loose stones and imbedded boulders on the surface. Water is scarce, the drainage being almost perfect.—*T. Fawcett*, 1882.
- 11 Outlines.**—East, rolling prairie. In Section 25 the line crosses a trail. Old Wives' Creek, dry at the time of survey, was crossed in Sections 13 and 25. This creek runs through the township. The water is sweet and good. The soil, north of the creek, is a good clay loam; south of it, it is a sandy loam, very dry and hard.—*A. F. Cotton*, 1883.
- 12. Outlines.**—The east is rolling, hilly and broken by turns, with a clay loam soil and little or no grass. The west is undulating prairie. A small creek runs through the township. This creek connects with Old Wives' Creek, and contains sweet and good water. The soil, north-west of the creek, is a good clay loam; on the other side it is a sandy loam, and very dry in places.—*A. F. Cotton*, 1883.
- The north is somewhat hilly and broken by ridges. Soil varies from sandy to clay loam.—*W. J. Thompson*, 1882.
- 13. Outlines.**—The surface is undulating, east and west, and high undulating in the north. A sluggish creek, flowing through a narrow clay flat, traverses the south part of this township diagonally. The land is high and undulating, and cut by many ravines. Soil, a sandy loam of moderate depth, with clay subsoil, and class 3.—*J. J. McArthur*, 1882.
- South, somewhat hilly and broken by ridges. Soil, sandy to clay loam, most cases a clay subsoil, Water mostly alkaline.—*W. T. Thompson*, 1882.
- Sub-division.*—The surface is rolling and undulating. A branch of Old Wives' Creek crosses the township from east to west in a valley having several smaller branch valleys. The water of this creek only flows in the spring time, and later on only stands in pools, which are fresh. There is an alkaline creek in the north-west section, and any water elsewhere is of the same nature. The south-west part of the township is alkaline. There is no growth of wood and the soil is not above class 3.—*W. Chipman*, 1883.
- 14. Outlines.**—A sluggish alkaline creek, flowing through an alkaline clay flat, follows the east boundary, a distance of three miles; then turns and runs in a north-westerly direction, diagonally across the north half of the township. On the south side of the creek there are several wooded ravines that start from near the south, which is not suited for farming. The west is very undulating. Soil,

about 6 inches deep, with clay subsoil. Class 3. A creek, flowing in a northerly direction, crosses the line several times in Sections 7 and 18. Along the east line were found a couple of marshes. The north is high and very undulating. Alluvial soil, from 3 to 6 inches deep, with clay subsoil. Class 3. Very little water.—*J. J. McArthur*, 1882.

Sub-division.—There is an elevated table land, with a broad valley, 200 feet deep, south-east and then southerly across the township. This valley contains the beds and pools of two creeks, flowing only in early summer. The bank on the south-west side is very abrupt and broken by intersecting ravines and gullies, generally filled with brush. Pure spring water streams, generally, are to be found in these gullies, which are, however, quickly absorbed into the alkaline soil of the valley. The soil of this township is generally poor, alkaline in the valley, and gravelly on the hills. Grass is short; cacti abundant. Soft sandstone is to be found in the beds of some of the gullies.—*W. Chipman*, 1883.

- 15. Outlines.**—The south half of this township is traversed by a sluggish, alkaline creek, flowing through an alkaline clay flat. Another alkaline valley runs through the most northerly range of sections. The remainder of the township is high and undulating. The soil is a sandy loam, of small depth, with clay subsoil. Class 3.—*J. J. McArthur*, 1882.

East, rolling and level prairie. In Sections 25 and 36 some alkaline flats and ponds were crossed. A couple of creeks were crossed in these same sections. Soil, class 3.—*J. K. McLean*, 1882.

Sub-division.—Broken and rolling prairie. Soil, sandy loam, on sandy subsoil. Classes 2 and 3. Poor for farming. Better for grazing, but water is not abundant. No wood.—*Robertson and Talbot*, 1882.

- 16. Outlines**—A creek, flowing into Rush Lake, runs through this township from south to north. The land is high and broken, and is of an inferior quality. The line of the Canadian Pacific Railway runs through Sections 30, 31 and 32. West, undulating, with several alkaline flats. Soil, clay. Class 3. Water in sloughs. Cart trail in Section 30. A creek flowing from a slough crosses the line in Section 19. South, soil from 3 to 6 inches deep. Class 3. Sections 3, 4 and 5 are an alkaline flat. A small creek crosses Section 1.—*J. J. McArthur*, 1882.

East, rolling, level and hilly prairie. A creek in Section 12.—*J. K. McLean*, 1882.

The north line runs along a large drainage basin, emptying into Rush Lake from the west. Through the centre of the drainage basin, in Section 34, a well-defined stream runs, emptying into the rushy extension of the lake, about 2 miles north-east. The banks of this stream are steep, composed of rich red clay, intercepted, at intervals, with layers of gravel or sand. The stream is fed by fresh-water springs rising in the sides of the coulées.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie surface. Soil, sandy loam, on sandy subsoil. Classes 2 and 3. Only fair farming land. No

wood. The C. P. R. crosses the north-west corner.—*Robertson and Talbot*, 1883.

- 17. Outlines.**—East, the soil is class 2. Rush Lake extends over Section 12 and much of 13. The Canadian Pacific Railway runs just north of the lake. The Cyprus trail crosses Section 13, and the Red Deer Forks trail Section 24. Sections 25 and 36 are stony. The north boundary is in hilly prairie, with a fair sandy loam soil. Class 2. A few sloughs are to be found on this line. The west is rolling and hilly soil; sandy loam, from 8 to 12 inches deep, with a clay and clay loam subsoil. Class 2. Section 18 is stony in places. The trail to the north crossing of Swift Current Creek crosses the line in Section 19.—*F. W. Wilkins*, 1882.

The southern sections incline towards Rush Lake, which lies on the eastern boundary and extends to the eastward. There are several ponds and a number of marshes along the line; also a creek flowing to Rush Lake across Section 3. The Canadian Pacific Railway crosses Section 5 to the north of the lake, and alongside of it the Fort Walsh trail.—*T. Fawcett*, 1882.

Sub-division.—Is a hilly prairie, except the west side of Rush Lake, and the north-west of the township, which are level and rolling. Rush Lake covers 1,000 acres of the township, and in the west is thickly grown with reeds. Marshes are scarce. The soil is a clay loam, with sand and gravel on the hills. Classes 2 and 3. Rush Lake Station of the Canadian Pacific Railway is on the south-west quarter of Section 13.—*J. J. McKenna*, 1883.

- 18. Outlines**—The north is rolling, with some ponds, and a little stony in places. Soil, ranging from sandy to clay loam. Class 2. The east is open and rolling, except Section 1, which is in Handsome Lake. Soil, an excellent clay loam. A few ponds. Class 2. South and west, open, rolling prairie. The soil is clay loam, from 9 to 15 inches deep, with a clay and sand loam subsoil. Class 1. Several marshes are crossed on this line. In Section 18 is the trail to the north crossing of Swift Current Creek. Section 7 is a little stony. Portions of the township along the south rank as 2nd and 3rd class.—*F. W. Wilkins*, 1882.

Sub-division.—Rolling prairie; a few hills in the north-west corner. Soil, generally a clay or clay loam; classes 2 and 3. Lakes numerous and large, some covering many hundred acres. All are alkaline, except Handsome Lake—the largest—which is nearly fresh.—*J. J. McKenna*, 1883.

- 19. Outlines.**—The east boundary is in gently-rolling, open prairie. Two deep ravines, leading into the Saskatchewan River valley, cross the line. Soil, generally a hard, heavy clay. Class 2. West, Sections 18, 7 and 6 are undulating. Soil, clay, with a clay and gravel subsoil. Classes 1 and 2. Sections 19, 30 and 31 are rough, broken and stony. The South Saskatchewan River crosses the line in Section 30. The river here is over 50 chains wide, with numerous sand bars, the surface of the water being over 600 feet below the prairie level. A spring brook crosses the line in Section 7. A couple of patches of poplar woods in Section 18.

South, open, rolling prairie. Soil, clay and clay loam, 12 inches deep in places, with clay subsoil. Class 2.—*F. W. Wilkins*, 1882.

Sub-division.—The River Saskatchewan crosses the north-westerly sections, and both banks and their vicinity are very broken. The remainder of the township is undulating, with a first and second class soil. There is timber growing along the river; but not elsewhere. Surface water is scarce. North of the Saskatchewan River, which is about three-quarters of a mile wide, the land is stony, and broken by hills and ravines. Hills range from 400 to 600 feet in height. Some of the ravines on the south side are 300 feet deep.—*C. C. DuBerger*, 1884.

- 20. Outlines.**—North, land is rolling, has a good soil, with a fair supply of water.—*E. Bray*, 1882.

The east boundary, except a small portion on the extreme north, lies in the ravines and valleys of the Saskatchewan River, and is so broken and rough as to be useless for farming purposes. Class 4. Section 31 is class 1, as the soil is excellent clay loam. A good deal of wood is here found in the ravines on both sides of the river, that upon the south side, however, being mostly killed by fire. On the east the river crosses Sections 13 and 24, and is about one-third of a mile in width.—*F. W. Wilkins*, 1882.

Sub-division.—The Saskatchewan River crosses the south-easterly sections and the surface of the township is much broken by the ravines thereof. There is no water beyond the river. The river banks are 400 to 600 feet high and some of the ravines 500 feet deep. Timber grows along the banks. Soil, classes 1 and 2.—*C. C. Duberger*, 1884.

- 21. Outlines.**—East, undulating and rolling prairie. Soil, sand and sandy loam; class 2. In the north half of Section 36 the line enters an alkaline flat. No water.—*G. C. Rainboth*, 1882.

West, level and rolling. The subsoil is clay and sandy loam; class 2. Water was found in marshes. Several ridges, rising from 60 to 65 feet above the prairie level, were crossed.—*E. J. Rainboth*, 1882.

South, land is rolling; has a good soil, with a fair supply of water.—*E. Bray*, 1882.

Sub-division.—Hilly and rolling prairie. Soil, sandy loam, on clay subsoil; class 2. Water scarce; but some good water ponds on Sections 8, 9, 16 and 17. No wood. North, rolling prairie. Soil, sandy loam, about 10 inches deep, clay subsoil; class 2. Sections 34 and 35 are hilly and rocky; class 3. Very little water along the line.—*J. B. O. Legendre*, 1883.

- 22. Outlines.**—North, rolling prairie, with a loam subsoil; class 2. A plentiful supply of water in sloughs and marshes. West, rolling and hilly. Soil, sandy loam; class 2. Several large sloughs or marshes.—*E. J. Rainboth*, 1882.

East, generally undulating and rolling. Soil is a sandy loam or clay, with a clay subsoil; class 2. Sections 1 and 12 are an alkaline flat. The north half of Section 13, Sections 24, 25 and 36 are rolling and hilly. Water in small quantities along the line.—*G. C. Rainboth*, 1882.

Sub-division.—Rolling prairie, with a second class soil, composed of sandy loam and clay subsoil. There are a few small lakes of alkaline water. All the creeks met with at the time of survey were dry.—*J. B. O. Legendre, 1883.*

- 23. Outlines.**—East, rolling and hilly, with numerous ponds and marshes. Loam subsoil. Classes 2 and 3. West, rolling prairie, loam soil. Class 3. Numerous ponds and marshes. In Section 30 there is a couple of clear-water lakes. South, soil, class 2. A plentiful supply of water in the sloughs and marshes.—*E. J. Rainboth, 1882.*

Sub-division.—Rolling prairie. Soil, sandy and gravelly, on clay subsoil; classes 2 and 3. There is a fair distribution of ponds, but the water is salty. No wood.—*J. B. O. Legendre, 1883.*

- 24. Outlines.**—This township is situate in a high, hilly country, known as the Coteau, which extends from Devil's Lake westward. In consequence of this, the township is second class, and consists of rough, hilly prairie, with numerous high knolls, and a plentiful supply of water in ponds and grass swamps.—*T. Kains, 1882.*

West, rolling prairie, with numerous ponds and marshes, and a few hills. Loam subsoil. Classes 2 and 3. East, rolling prairie. Loam subsoil. Class 3. The surface is broken, in Section 13, by several hills.—*E. J. Rainboth, 1882.*

Sub-division.—Rolling prairie; soil, sandy loam on clay subsoil. Class 2. Ponds and marshes are very plentiful and evenly distributed, but mostly alkaline. No wood. Grass short and poor.—*J. B. O. Legendre, 1883.*

- 25. Outlines.**—West, rolling and hilly; the hills 50 to 150 feet. The soil is sandy loam, about 6 inches, on a sand subsoil. Class 3. Water in ponds and marshes. East, hilly prairie, with numerous deep lakelets of good water between the hills. Hills range from 50 to 150 feet in height. Soil, sandy loam, about 6 inches deep, with sand subsoil. Class 3. Good pasture.—*J. A. Maddock, 1883.*

The southern sections are rough and uneven, with many knolls, ponds and marshes. There is a considerable lake on Section 1. No wood.—*T. Kains, 1882.*

Sub-division.—Soil, very suitable for agricultural purposes, but the surface is very broken by sloughs and lakes and hills. Some of the hills along the northern boundary are almost perpendicular. The water in the swamps is usually fresh; that in the lakes alkaline. There is no timber of any kind.—*J. Burke, 1883.*

- 26. Outlines.**—West, rolling. Soil, a light sandy loam on a sand subsoil. Class 3. In Sections 7 and 18 the line crosses a range of hills 200 feet high and 3 miles long. A few marshes were crossed by this line. East, similar to west. Water in ponds and marshes.—*J. A. Maddock, 1883.*

Sub-division.—The surface along the south end of this township is hilly and broken, but gets more open towards the north, where the prairie along the correction line is almost level. The soil is generally a sandy loam on a clay subsoil, with occasional

gravelly ridges southwards. The lakes and marshes are fairly and evenly distributed. The township is destitute of timber.—*J. Burke*, 1883.

- 27. Outlines.**—Level and rolling prairie. Soil, clay loam, from 4 to 6 inches deep, with clay subsoil. Classes 2 and 3. Very little water in the west, but more to the east.—*J. A. Maddock*, 1883.

- 28. Outlines.**—Is slightly rolling and undulating prairie. The western end of Red Deer Lake runs 4 miles through this township, in a crescent shape, from north-west to south-east. The valley runs out to the level of the surrounding prairie, a mile to the west of the crossing. Red Deer Lake is made up from a chain of lakes, some large and some small, and all more or less alkaline. East, soil, clay loam, about 5 inches deep, with a clay subsoil. Class 2. Poplar, ash and raspberry bushes grow along the lake shore. West, soil, sandy loam, 6 inches deep, with sand subsoil. Class 3. No water.—*J. A. Maddock*, 1883.

Level and rolling prairie. Soil, clay and dark loam on clay subsoil in the north-east and sandy loam and clay north-westwards. Class 2.—*T. Fawcett*, 1883.

- 29. Outlines**—South, undulating. The soil is principally a good clay loam, with clay subsoil.—*T. Fawcett*, 1883.

West and east, undulating and rolling. Soil, clay loam, 6 inches deep, clay subsoil; class 2. In Section 36 is a small creek, about dry at the time of survey (August), the banks of which are about 60 feet high. Boulders show on the surface in this section. A small creek of good water crosses Section 6, flowing north-east.—*J. A. Maddock*, 1883.

- 30. Outlines.**—Section 1 is almost all in the bottom of a ravine, the banks of which are 60 feet high, with boulders showing on the surface. Undulating prairie. Soil, clay loam, 8 inches deep, with clay subsoil. There is very little surface water. The soil in the eastern part is class 2, and in the western part classes 1 and 2.—*J. A. Maddock*, 1883.

- 31. Outlines.**—Across Sections 6, 7 and 18 is open, rolling prairie, and classed 1; 30 and 31 are knolly and hilly, with light sandy soil, and classed 4. A belt of very fine poplar wood grows on Section 30, and appears to reach to a considerable distance east and west. Excellent building timber, in considerable quantities, was observed in this belt. The east boundary was surveyed over an open, rolling prairie. Soil, sandy loam, mostly class 1, with some class 2. A small creek was crossed in Section 36. Course, north-easterly.—*F. W. Wilkins*, 1883.

- 32. Outlines.**—Open, rolling prairie, with sandy loam soil. Class 1. Sections 12 and 13 are submerged by Goose Lake. This lake is about 4 miles wide by 5 in length, is apparently very shallow, and at the time of survey was literally covered with wild ducks, geese, &c. West, rolling country. Sections 6 and 7 are class 4, and have many sandy knolls, with a few small poplars and bushes growing on them. The balance of the line northwards is class 1, having a good clay loam soil.—*F. W. Wilkins*, 1883.

North, slightly rolling land, with soil of a very superior quality.—*E. Bray*, 1883.

- 33. Outlines.**—West, open rolling prairie. Sandy knolls in Section 19. Sections 6, 7, 30 and 31 are class 1, with sandy loam soil. Sections 18 and 19 are class 4. Eagle Creek, flowing in a marshy valley, about $\frac{1}{2}$ mile in width, and depressed below prairie level about 60 feet, is crossed in Section 18, and is, as usual, wide, low, saline and deep, with very muddy bottom and easterly course. East, open, rolling prairie, generally. Sections 13 and 24 are broken, in places, into sandy knolls, having a few bushes growing on them. Class 4. Section 1 is class 1. The balance of line is class 3. Eagle Creek, before referred to, after crossing the township, leaves by Section 36. The stream at this point is about 60 feet wide, $2\frac{1}{2}$ feet deep, with a slow, sluggish current.—*F. W. Wilkins*, 1883.

As it appeared from the southern boundary, the southern part is gently-rolling, with a capital soil.—*E. Bray*, 1883.

- 34. Outlines.**—Along the west boundary it is open, rolling prairie. Sections 6, 7, 18 and 31 are class 1, with good sand loam soil. Sections 19 and 30 are class 4, being covered, for the greater part, by a large saline flat and marsh. Eastwards, it is open, rolling prairie generally. Section 1, the north half of 24 and the south half of 25, are generally marshy, and classes 3 and 4. The balance of the line is class 1, and has a sandy loam soil.—*F. W. Wilkins*, 1883.

- 35. Outlines.**—West, rolling prairie. Soil, clay loam, about 6 inches deep, on a yellow clay subsoil; class 1. The surface is broken by numerous marshes. A saline lake on Sections 7 and 18. Eastwards, it is open prairie, with clay loam soil; mostly class 1, with some 2 and 4. A slow, saline creek was found in a large bog in the north half of Section 36. The size of the creek was undeterminable, and its bottom very soft.—*F. W. Wilkins*, 1883.

- 36. Outlines.**—The soil, northwards, is a heavy black loamy soil. Water good and fresh. About one and a-half miles south of the north boundary there appears a limited supply of timber.—*W. A. Ashe*, 1882.

A large lake occupies the south-west. East, open, rolling and hilly. Soil, clay loam, with loamy sand. The subsoil is clay. Classes 2 and 3. Several saline marshes were crossed. Eagle Creek crosses the line in Section 24, flowing in a north-easterly direction. The creek is very deep, and on each side are thick woods of maple and willow. Water is slightly alkaline. This creek again crosses the line in Section 13. In Section 1 an old cart trail crosses the line, and in the southern portion a saline creek, 6 inches deep, flows eastward.—*F. W. Wilkins*, 1883.

- 37. Outlines.**—This township is open, rolling prairie. Class 2.—*J. S. Dennis, jun.*, 1878.

North, rolling prairie. In Sections 32 and 36 the line crosses a trail.—*F. Vincent*, 1884.

The surface of this township is of a very heavy rolling character. The sloughs are deep, and the water generally alkaline. It is not timbered. Brier and wolf willow are occasionally met with on the sides of the hills. This township would make excellent grazing land. It affords excellent shelter for stock, and the grass is luxuriant in the ravines and gullies. There are occasional fresh-water sloughs, which are deep. The soil is first class throughout, being clay loam on a clay subsoil.—*A. G. Cavana*, 1883.

The soil southwards is a heavy black loam. Water good and fresh. About three miles north of the base line (size and extent unknown) there is timber.—*W. A. Ashe*, 1882.

Sub-division.—Nearly all first class land, of a slightly rolling character, having a plentiful supply of water, but no wood.—*C. A. Lett*, 1884.

- 38. Outlines**.—The township is an open, rolling prairie. The soil is first class throughout, being clay loam on a clay subsoil.—*A. G. Cavana*, 1883.

Sub-division.—The surface of this township is in some places level and in others rolling. The soil is a very good clay loam, and first class for farming. There is no wood. Small swamps are very evenly distributed, but there are no creeks of any importance. A cart trail crosses from Section 7 to Section 25, and another crosses Sections 31, 32 and 33, while a third one touches the south-west and south-east corners. Several of the northern sections are a little hilly.—*F. Vincent*, 1884.

- 39. Outlines**.—The North Saskatchewan River crosses the northern part. There are deep sloughs, bordered with willow. There are also some small clumps of poplar, with the usual belts along the river. The soil is generally first class, excepting in a few sections on the eastern side, where it is gravelly. The surface is rolling.—*A. G. Cavana*, 1883.

South, open, rolling prairie. Creeks were crossed in Sections 1, 5 and 6. Deep Creek, running north through Deep Creek Valley, was crossed in Section 4.—*F. Vincent*, 1884.

Sub-division.—Open prairie and no timber, except on the banks of the river and on the islands. Numerous sloughs furnish water and hay in abundance, and a creek of good water, known as Deep Creek, runs north. The Saskatchewan River crosses the north-east quarter of the township in a diagonal direction, and has very broken banks; but elsewhere the township is an excellent one for settlement, and class 1. The telegraph line and the Battleford trail cross parallel to the river.—*R. C. Laurie*, 1883.

- 40. Outlines**.—North, prairie, with a sandy soil. Some bluffs of poplar and willow.—*G. B. Abrey*, 1882.

West, rolling prairie. Soil, clay loam, 7 inches deep, with clay subsoil. Class 1. Surface dotted with clumps of poplar and willow. The North Saskatchewan River crosses the line between Sections 7 and 18. At this place the river is about 40 chains wide, the current running about 4 miles per hour. The banks

are about 150 feet high and heavily timbered. Water is abundant in sloughs and ponds.

East, level prairie, dotted with clumps of poplars and willow. Soil, clay loam. Class 1. Sloughs, bordered with willows, were crossed by the line.—*A. G. Cavana*, 1883.

Sub-division.—The Saskatchewan River crosses the southwest corner. All the township north of the river is fine farming land, and consists of rolling prairie, black loamy soil on a clay subsoil, and supporting a rich and luxuriant growth of vegetation. There is no building timber, except in some of the ravines, but in a few years the scattered poplar bluffs—if not burnt—will make large timber. There is a good supply of surface water in marshes, and hay is abundant and rich.—*R. C. Laurie*, 1883.

41. *Outlines.*—West, open prairie. Very little water or timber.—*H. H. Robertson*, 1884.

The country on the east boundary is first class sand loam soil, as far north as the middle of Section 13, when it becomes very wet, with a great deal of willow scrub, changing, in a short distance, to a very sandy country, with a large quantity of poplar, averaging 8 inches in diameter.—*J. K. McLean*, 1883.

South, prairie; soil, sandy. Some bluffs of scrubby poplar and willows were met with.—*G. B. Abrey*, 1882.

42. *Outlines.*—Eastwards, the soil, for agricultural purposes, is chiefly second class. The land is rolling and hilly in places, with poplar bluffs, some being of considerable extent. Willow scrub in Section 1. Several clear-water ponds were crossed.—*J. K. McLean*, 1883.

43. *Outlines.*—Is undulating prairie, with a few patches of willow scrub and dry wood in the east half. Some bluffs of 8-inch poplars appear in the south half of Section 1. There is good water in the ponds and hay marshes. The soil is a rich clay or clay loam, and ranks first class, except in Section 1, which varies from clay to pure sand.—*P. R. A. Belanger*, 1884.

44. *Outlines.*—The soil along the north boundary is generally of a high average, consisting of an excellent sandy loam, with a clay subsoil. Sufficient poplar for building, fencing and fuel purposes was found, also good water.—*W. A. Ashe*, 1883.

The west half is rolling and open prairie; the east half is heavy rolling for the first 3 miles, and interspersed with bluffs of dry wood. There are numerous ponds and hay marshes with good water, and mostly bordered with thick willows. A creek, 10 links broad and 2 feet deep, of excellent water, crosses Section 24, running south-easterly. It originates from springs on Section 24. The soil is a rich clay loam, with clay subsoil, and ranks first class.—*P. R. A. Belanger*, 1884.

45. *Outlines.*—The east boundary forms part of the Thickwood Hills, and is hilly or heavy rolling prairie, with a considerable quantity of willow scrub. It is considerably broken by marshes, sloughs, ponds and lakes, mostly bordered by willows. A few bluffs of dry wood appear here and there. The east half is more heavily timbered. The soil is a rich clay or black loam, with clay sub-

soil. Fort Pitt and Carlton trail was crossed in Section 36.—*P. R. A. Belanger*, 1884.

Rolling country, with a black sandy loam soil, and first class, though a trifle stony on top of elevations. Water is good and in sufficient quantity. From Section 1 to Section 12, inclusive, the prairie appears to be completely open; further north it is prairie and bluffs of poplars, with scrub willows. Though thickly wooded the bluffs are small and more numerous in the centre. Cart trail from Jack Fish Lake to Carlton in Section 31.—*J. I. Dufresne*, 1884.

The soil southwards consists of an excellent sandy loam, with clay subsoil. Some poplar.—*W. A. Ashe*, 1883.

- 46.** *Outlines.*—East, rolling country, generally. Sections 13, 24 and 25, on this line, are class 1. The north half of Section 1, and Section 12, are class 2. The balance of the line is class 3. A small saline creek, with an easterly course, is in Section 1, and is bordered by a large bog. Eagle Creek is crossed twice by this line, on Sections 13 and 24, respectively, and has a slow current, is about 60 feet wide and very deep. A good deal of good firewood (ash, maple and willow) is on Sections 13 and 24, along the creek. No wood elsewhere on this line.—*F. W. Wilkins*, 1883.

The east boundary is all occupied by the Thickwood Hills, and may be called heavy rolling rather than hilly, as the hills are only from 12 to 20 feet high. It is much broken by hay marshes, ponds, sloughs and lakes, all bordered with willow scrub, so thickly as to give this township the appearance of a timbered country at a distance of a few miles. There are scattered spruces in the north-east half of this township, which also appears to be timbered with poplar. The soil is a rich clay or black loam, with clay subsoil, and ranks first class.—*P. R. A. Belanger*, 1884.

Rolling country with black sandy loam soil. This township is prairie, with small bluffs of poplars and scrub willows; these last grow generally around marshes or lakes, which give a good supply of fresh water. The soil is mostly all first class, though some parts are stony.—*J. I. Dufresne*, 1884.

- 48.** North, poplar, of large dimensions, is of common occurrence, as well as occasional bluffs of spruce, as large as 18 inches in diameter.—*W. A. Ashe*, 1883.

The soil on the north boundary of this township ranks third class. The line runs through a very rough country, crossing the Thickwood Hills. Much of the country is solid timber, some of it being very good spruce. Slightly rolling country; in places low, level and wet, covered with poplar trees and scrub on the knolls, and willow scrub around the muskegs and in the low land. Part of Lake St. Elmo lies on Sections 31 and 32. Meeting Lake lies near the north-west corner in the next range. Soil, generally, a sandy loam.—*T. Drummond*, 1883.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XII.

9. *Outlines.*—Westwards, it is undulating prairie. Old Wives' Creek runs through the township, and at the time of survey was a succession of pools, with cut clay banks, about 20 feet high. The soil is a clay loam, 6 inches deep, on a clay subsoil, and class 3. In section 31 there is an old trail.—*A. F. Cotton*, 1883.

Southeastwards, the surface is undulating, with a good clay loam soil, but with water scarce and grass stunted.—*T. Fawcett*, 1883.

10. *Outlines.*—Westwards, undulating prairie. The soil is clay, with little or no grass.—*A. F. Cotton*, 1883.

11. *Outlines.*—East, undulating prairie. A small creek runs through this township. Water sweet and good. The soil, north of the creek, is a good clay loam, and south of it is a sandy loam, very dry and hard. Westwards, gently-rolling prairie.—*A. F. Cotton*, 1883.

12. *Outlines.*—The north and western portions are a fine tract of undulating prairie, the soil being of excellent quality and well adapted to agricultural purposes. Water mostly alkaline.—*W. T. Thompson*, 1882.

East, undulating prairie. A small creek runs through the township, the water of which is sweet and good. The soil varies from a clay loam to a sandy loam, very dry and hard. West, gently-rolling prairie. The soil is a clay loam.—*A. F. Cotton*, 1883.

13. *Outlines.*—Along the east and north boundaries it is undulating prairie. Alluvial soil, about 6 inches deep, with clay subsoil. Class 3 on the east, and classes 2 and 3 on the north line. Very little water was seen along either line. Generally, the land throughout the township is high and undulating. The soil is a sandy loam, of moderate depth, with clay and, in some cases, gravel subsoil.—*J. J. McArthur*, 1882.

Along the west and south boundaries it is a fine tract of undulating prairie, the soil being of excellent quality and well adapted to agricultural purposes. Water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Surface generally level, with a few portions slightly undulating. Soil, a sandy loam, of an average depth of about 12 inches, and of a good quality; nearly class 1. Water is not plentiful, and, if the season is very dry, is scarce. There is no wood. On the whole, the township is a fair one for cultivation.—*H. Kerr*, 1883.

14. *Outlines.*—Along all the boundaries it is undulating prairie. Alluvial soil, 6 inches deep, with clay subsoil. Class 3, with

some class 2. In Section 12 a creek crosses the east line twice, and in Section 13 nine times. Very little water was seen along the south line, and on the north line water was not plentiful, that in the creeks being stagnant.—*J. J. McArthur*, 1882.

West, a fine tract of undulating prairie, the soil being of excellent quality and well adapted to agricultural purposes. Water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Surface, rolling and undulating, and broken in a few places. Soil, a sandy loam, of a depth of about 8 inches, and might be graded class 2. Water is scarce, but what there is is good. Some scattering stones are found on the sides of the ravines.—*H. Kerr*, 1883.

- 15. Outlines.**—The south part of this township is traversed by two sluggish alkaline creeks, one tributary of the other, and both of which flow in a north-westerly direction through a deep valley. The remainder of the township is high and undulating. The soil is a shallow sandy loam, with clay subsoil. Generally class 3. Water was seen in marshes and sloughs along the northern boundary.—*J. J. McArthur*, 1882.

Along the west boundary, in Section 31, a large, deep coulée was crossed (then dry), which drains towards the east into a stream emptying into Rush Lake. A facing in the north bank of the coulée, Section 17, showed the following formations at the following distances below the surface:—Reddish clay, 4 feet; gravel seam, 6 feet; white clay, 10 feet; red clay, 25 feet; clay slate (rock in process of formation), 10 feet down to level. After crossing the coulée, for the rest of the distance the line passes over a dead level plateau—excellent land for either farming or grazing purposes.—*T. Fawcett*, 1882.

Sub-division.—Surface hilly and mountainous; much broken by deep ravines. Soil, sandy loam of 4 to 6 inches. There are occasional lakes containing good water, and some small brooks, but no timber. Township more suitable for grazing or sheep raising.—*H. Kerr*, 1883.

- 16. Outlines.**—From near the north-east corner Swift Current Creek runs diagonally across the township. The land on either side is high and broken. The Canadian Pacific Railway line runs through this township, parallel to and a short distance from the Swift Current Creek. Soil, of a poor quality, from 3 to 6 inches deep, with clay subsoil. Class 3. Several alkaline flats were crossed by the east line. Swift Current Creek flows south through Section 36, and then west from Section 25. A cart trail crosses in Section 25, between the creek and a large marsh. Water was seen in marshes and sloughs along the south line.—*J. J. McArthur*, 1882.

On the west boundary, southward, the first half of the township presents a gradual incline to Swift Current, the soil being a rich loam. Some brush is growing on the banks of the stream, but no timber of any account. The south bank is very high and steep, and is cut by numerous coulées and watercourses. Beyond the bank the surface retains its broken, hilly appearance. Fresh-

water marshes are of frequent occurrence. Pasture excellent. North, it is a high level plateau, from which the steep, well-defined banks of Swift Current Creek are visible for miles. The plateau abruptly terminates, and dips down over 100 feet into the valley of the creek. The stream is 66 feet wide and 2 feet deep, with an apparent current of 5 miles an hour. The bottom is mostly hard and gravelly. On the west side of the stream the surface becomes more broken, and there are several ridges and buttes of considerable height. The soil, however, is rich, and the hills less gravelly than those of the Coteau.—*T. Fawcett*, 1882.

Sub-division.—Surface, undulating and rolling prairie. Soil, of a sandy loam and dry nature. Class 2. Swift Current River meanders through Sections 19 to 30; also through 35 and 36. It is a stream of good water, which never dries up, which would be of importance to settlers in its vicinity. No bush. The Canadian Pacific Railway traverses the township from Sections 18 to 25. Waldeck station is located here.—*H. Kerr*, 1883.

- 17. Outlines**.—The north boundary is in rolling to hilly prairie, with a good many ponds. Soil, varying from sandy to clay loam; class 2. The east boundary is rolling and hilly prairie, stony in places. Soil, sandy loam, from 8 to 12 inches deep, with clay and loam subsoils; classes 2 and 3. The trail at the north crossing of Swift Current crosses Sections 31, 32 and 33, and a branch trail to Qu'Appelle from 31 to 24.—*F. W. Wilkins*, 1882.

West, in Section 18, is a range of hills, forming the left bank of Swift Current Creek. Near the creek, in Section 30, are several deep coulées, in one an excellent spring creek. Swift Current Creek meanders through Sections 18, 19, 30 and 31. The iron bar at the north-west corner was planted in the bed of the stream. At this point the banks are very steep and high, composed of a rich red clay, and intersected by several deep wooded coulées. The banks retain their jagged and broken appearance from this point north, until they run into the more contorted banks of the Saskatchewan. On the south boundary it is high level plateau, from which the course of Swift Current Creek is visible for miles. The plateau abruptly terminates in 100 feet banks to the valley of the creek, which is 66 feet wide, 2 feet deep, and has a 5-mile current over a hard and gravelly bottom. On the west side of the stream the surface becomes more broken, and several ridges and buttes of considerable height occur. The soil, however, is rich, and the hills less gravelly than those of the Coteau.—*T. Fawcett*, 1882.

Sub-division.—The surface of this township is rolling. The soil is a sandy loam of varying depths, and in value ranges from classes 1 to 3. Swift Current Creek enters by Section 2, and follows a very tortuous course northwards to the north-west corner. There are numbers of small brooks which flow into the creek, which makes pasturage generally excellent. Several trails cross the township, branching from the main crossing of Swift Current in Section 31.—*H. H. Robertson*, 1883.

- 18. Outlines**.—Going north, and after leaving the valley of the Swift Current in Section 6, is excellent land, well watered, and fit for

all purposes of agriculture. Sections north of this are very fair, a little uneven and plentifully supplied with water. Section 31 is stony in places.—*T. Fawcett, 1882.*

East, rolling to hilly, with some stones in places, and a few ponds. Soil, sandy to clay loam. Class 2. North, open, rolling prairie. Soil, from Section 36 to 34 a hard gravelly loam. Class 4. Balance, the soil is a fair sandy loam. Class 2.—*F. W. Wilkins, 1882.*

South, rolling and hilly. Soil, a clay loam, from 8 to 10 inches, on a clay subsoil. Class 2. Trail to north crossing of Swift Current Creek crosses Sections 13 to 4. In the south-west corner is Swift Current Creek, near which are small poplar trees. Marshes are numerous. The soil along the west is clay loam; class 1.—*F. W. Wilkins, 1882.*

Sub-division.—The surface is rolling, with some high knolls. The land varies from a light clay loam to dry sand in several places. The summits of the hills are covered with gravel. The township would be very suitable for grazing purposes, as there is a good supply of fresh water in ponds and marshes. Swift Current Creek, in the south-west corner, and the trail to there, diagonally cross the south-east quarter.—*H. H. Robertson, 1883.*

- 19.** *Outlines.*—East, Sections 1, 12 and 13, open, gently-rolling prairie, having a few ravines. Soil, a loamy clay. Class 2. Sections 24, 25 and 36 are in the ravines and valley of the Saskatchewan River, and are broken and rough. Soil, heavy clay. Class 4. The river is about one-third of a mile wide, full of sand bars. Channel, average depth of 3 feet 6 inches. A great deal of good wood grows in the ravines, and close to the river are a few small groves of cottonwood timber, some of which are over 5 feet in diameter. The valley is about 600 feet deep at this point, but is considerably lower both east and west. South, gently rolling. Soil, sandy loam. Classes 2 and 3. Marshes on this line.—*F. W. Wilkins, 1882.*

Going north along the western boundary the country is gently-rolling prairie for the first 4 miles, and good arable land; then the surface becomes somewhat rough and uneven approaching the river.—*E. Bray, 1882.*

Sub-division.—In this township there is some good farming land. Soil varies from a sandy loam to sand and gravel. The Saskatchewan River crosses the north-eastern portion of the township, and the neighboring country is very much broken and hilly, some of the ravines being from 400 to 600 feet deep. In some of the gullies are poplar and willow wood. In the north the soil east of the river is 2nd class, that adjacent to and west of the river being 4th class.—*Robertson and Talbot, 1883.*

- 20** *Outlines.*—North, the land is rolling, and has a good soil, with a fair supply of water. West, rolling prairie. Soil, from 2 to 5 inches deep, with clay subsoil. Class 2. Saskatchewan River is crossed in Sections 6 and 7.—*E. Bray, 1882.*

East, mostly open prairie. Section 1 is badly cut up by several deep ravines, containing considerable wood. Class 4. Balance of this line is strong clay and clay loam. Soil, class 1, and well

adapted to settlement. There has been an enormous destruction of wood in the river valley by fire.—*F. W. Wilkins*, 1882.

Sub-division.—The level sections of this township are excellent farming lands ; but the broken sections along the Saskatchewan River are good only for grazing purposes. The river enters at the south-west corner—Section 6—and leaves at Section 3. Marshes and water fairly distributed through the township.—*Robertson and Talbot*, 1883.

- 21. Outlines.**—West, rolling and hilly. The soil is of good quality, but on account of its rough character is more suitable for grazing than for any other purpose. South, land is rolling, has a good soil, with a fair supply of water.—*E. Bray*, 1882.

East, rolling and level. Soil, clay and sandy loam. Class 2. A few marshes.—*E. J. Rainboth*, 1882.

Sub-division.—The eastern and middle of this township is well adapted for agriculture, being a dark alluvial soil. The remainder of the township is high, rolling and hilly. Soil, gravelly and sandy loam, suitable for grazing. Two large lakes occur in the township, respectively of an area of 700 and 1,000 acres each.—*S. M. Starkey*, 1883.

- 22. Outlines.**—North, rolling prairie, with loam soil ; class 3. Marshes are numerous, and Section 32 is rather hilly. East, rolling and hilly prairie. Soil is sandy loam ; class 2. Several large marshes on Sections 12 and 13.—*E. J. Rainboth*, 1882.

West, rolling and hilly, with a soil of good quality. This tract of land is more suitable for grazing than any other purpose, on account of its roughness.—*E. Bray*, 1882.

Sub-division.—Rolling prairie. Soil, good sandy loam on clay subsoil ; well adapted for agriculture. A narrow strip of hilly prairie extends along the west side, which is suitable for grazing only. Water fairly distributed.—*S. M. Starkey*, 1883.

- 23. Outlines.**—West, rolling and hilly, with stones and gravel on the knolls. Soil is clay, sand and gravel ; the subsoil is clay and gravel, with sand in places. Classes 2 and 3. Numerous grass swamps, and in Sections 30 and 31 a large pond. A good water creek, with fast current, in Section 19.—*T. Kains*, 1882.

South and east, rolling prairie. Soil is loam ; classes 2 and 3. Water abundant in marshes and ponds. All class 3 in the south, where Section 5 is rather hilly.—*E. J. Rainboth*, 1882.

Sub-division.—Towards the north and the north-west the surface is rolling and hilly, with a light sandy loam soil on a clay subsoil. Sections 31, 32 and 33 are broken by a large lake. Towards the south-east the soil is of a better quality, and the surface is level and slightly rolling. There are several large lakes and a general dotting of lakelets, ponds and marshes. The soil bears a general average of class 2.—*S. M. Starkey*, 1883.

- 24. Outlines.**—The northern sections are second class and rough, while along the western boundary the country is second and third class, and consists of a rough, hilly prairie, the ridges of which have numbers of boulders. There is a plentiful supply of water in the bottoms, as well as grass swamps.—*T. Kains*, 1882.

East, rolling prairie. Loam soil. Classes 2 and 3. Numerous ponds and marshes. The south half of section 12 is stony.—*E. J. Rainboth*, 1882.

Sub-division.—Is most suitable for grazing; grass swamps are numerous and water is good. The south part is very marshy, and contains excellent springs of water. The soil is generally class 2, and the surface mostly hilly, with some pieces of rolling prairie. The southern halves of Sections 5 and 6 are submerged by lakes.—*S. M. Starkey*, 1883.

- 25.** *Outlines*.—West and east, rolling and hilly, hills ranging from 50 to 150 feet. Soil, sandy loam, 6 inches deep, with a sand subsoil. Class 3. Water in limited supply. A small lake was crossed in Section 7.—*J. A. Maddock*, 1883.

The south boundary is second class, and consists of rough, hilly prairie with numerous high knolls and ridges, with quantities of boulder stones, and a plentiful supply of ponds and grass swamps.—*T. Kains*, 1882.

Sub-division.—Rolling prairie, and stony. Soil, sandy loam on sandy subsoil. Nearly class 2. On the high land it is good enough for grazing, and in the lower levels some good farming land was found. There is a large lake on sections 24 and 25, and several smaller ponds elsewhere. No wood.—*J. Bourgeois*, 1883.

- 26** *Outlines*.—Heavily-rolling in the south-east, gradually falling to to the level of the clay plains in the north-west. Soil, clay loam. North-west, classed 1 and 2; sandy loam, south-east, class 3. There is a chain of lakes running north-west at the east side. In Sections 12 and 13 there is a range of hills 200 feet high and about 3 miles long. Water, generally, is scarce.—*J. A. Maddock*, 1883.

Sub-division.—Level prairie in the north-west, and rolling in the south-east. Soil, generally, heavy clay on clay subsoil, and in a few places sandy loam on sandy subsoil. Generally class 2; only fair farming land. Water scarce. No wood.—*J. Bourgeois*, 1883.

- 27.** *Outlines*.—West, undulating prairie. Soil, loam 6 inches deep, clay subsoil; class 1. A small alkaline creek, nearly dry, flows through Sections 31 and 30, parallel to the line, and in Section 19 crosses the line. Some marshes. East, level and rolling; soil, clay loam, from 4 to 6 inches deep, with a clay subsoil; class 2. Water scarce.—*J. A. Maddock*, 1883.

- 28.** *Outlines*.—North, undulating. The soil is principally a good clay loam, with clay subsoil. In Section 34 the line crosses a stream of alkaline water, flowing north-east, having an average width of 25 feet, 18 inches deep, and a current of about 4 miles an hour. Half a mile south from this point there is a long range of lakes bearing south-west, out of which this stream empties.—*T. Fawcett*, 1883.

There is a large alkaline lake, 3 miles long, and about the same in width, to the south-west, which is connected by a little creek with a chain of lakes running south-west. Good water very scarce. West, rolling and level; east, rolling and undulating prairie. Soil, sandy loam, 6 inches deep, with a sand subsoil.

Class 3. Southwards the country is fairly level, with a light clay soil about 4 inches deep, on clay. Class 2. Water scarce.—*J. Bourgeois*, 1883.

- 29. Outlines.**—East, gently-rolling prairie; west, level prairie. Soil—all round—lay loam, from 4 to 6 inches in depth, with clay subsoil. Class 2. A small creek of good water in Section 1. Some sandy loam soil to the north. Along the west line, water was scarce.—*J. A. Maddock*, 1883.

Undulating, rolling and level by turns. Soil, clay and dark loams. Classes 1 and 2. There is a fair supply of water in creeks, ponds and marshes; good for farming and pasture.—*T. Fawcett*, 1883.

- 30. Outlines.**—West, undulating prairie. Soil, clay loam, 5 to 8 inches deep, clay subsoil; class 2. Water scarce throughout the township. In the east the soil is rather better than in the west; it is clay loam, and class 1.—*J. A. Maddock*, 1883.

- 31. Outlines.**—The west boundary is in open, rolling prairie, with a few fresh-water marshes scattered along. Section 31 is classes 2 and 3. The balance of the line is class 1. The soil is generally clay loam. Eagle Creek, winding about in a valley nearly a mile in width, and depressed about 120 feet below prairie level, was crossed in Section 31. The creek, as usual, is wide, muddy, saline and deep, with an easterly course. Eastwards, across Sections 1, 12 and 13, it is open, rolling prairie; class 1. The balance of the line is knolly and hilly, with light sandy soil; class 4. A belt of very fine poplar wood was found on Section 25, and appeared to reach to a considerable distance east and west. Excellent building timber, in considerable quantities, was observed in this belt.—*F. W. Wilkins*, 1883.

- 32. Outlines.**—Along the north the land is slightly rolling, and consists of a very superior soil. Eagle Hill Creek crosses the central northern sections, and is slightly alkaline.—*E. Bray*, 1883.

The west boundary is in open, rolling prairie, with sandy loam soil; mostly first class. A very small creek, flowing east in a deep and narrow valley, with a little wood in it, crosses Section 7, flowing to Eagle Hill Creek. In the east, Sections 1 and 12 have a number of sandy knolls, having a few small poplar trees on them, and will not rate above class 4. The balance of the line northwards has a good clay loam soil, and will rank class 1.—*F. W. Wilkins*, 1883.

- 33. Outlines.**—West, rolling to knolly prairie, with a good many small marshes and ponds in the north, some of which are fresh and some saline. Some stony and gravelly land in Sections 30 and 31. Second and third class. Sections 6, 7, 18 and 19 are first class. East, open, rolling prairie, broken into sandy knolls in Section 24. Sections 1, 12, 25 and 36 are class 1, with sandy loam soil. Sections 13 and 24 are class 4. Eagle Creek, flowing in a marshy valley, about $\frac{1}{2}$ mile in width and 60 feet deep, is crossed in Section 13, and is wide, slow, saline and deep, with very muddy bottom.—*F. W. Wilkins*, 1883.

South, rolling prairie. Soil, clay loam, 9 to 16 inches ; clay subsoil ; class 1. Eagle Hill Creek, 4 feet deep, crosses the line in Section 4, flowing north. Also a few marshes. *E. Bray*, 1883.

- 34. Outlines.**—The west boundary, in Sections 6, 7 and 18 crosses, about midway, a high range of hills, lying easterly and westerly, and about 6 miles in length. The country through these hills is very much broken, and nearly covered with mixed boulders, stones, &c. Fourth class. Sections 19 and 31 are rolling prairie, and first class. Nearly the whole of Section 30 is occupied by a saline lake of perhaps 4 miles in length. East, open, rolling prairie. Sections 1, 12, 13 and 36 are class 1, with good sand loam soil. Sections 24 and 25 are class 4, being covered, for the greater part, by a large saline flat and marsh.—*F. W. Wilkins*, 1883.

- 35. Outlines.**—East, rolling. Soil, clay loam, about 6 inches deep, on a yellow clay subsoil. Class 1. The surface is broken by numerous marshes.—*F. W. Wilkins*, 1883.

West, Sections 6, 7, 18 and 19, very hilly prairie, rising sharply to the north, and second class. Sections 30 and 31 are very much broken and hilly. Third class. This hilly country forms part of Le Grand Coteau du Missouri, or third prairie steppe.—*F. W. Wilkins*, 1883.

- 36. Outlines.**—North, the soil is light, but very much broken up with hills, the hill tops being covered with stones and boulders. Water good and fresh.—*W. A. Ashe*, 1882.

The west is entirely in very hilly country, with some nice valleys, but generally very much broken by marshes and ponds, and very stony. Third class throughout. The east is in rolling, hilly prairie, with a few small fresh-water marshes in places. Clay loam soil. Class 1. A good sized saline lake in Sections 12 and 13.—*F. W. Wilkins*, 1883.

- 37. Outlines.**—West, in the Eagle Hills, surface very broken. Soil⁷ black clay and sandy loam, from 6 to 10 inches, with clay and sand subsoil. Class 2. Water in marshes and spring creeks, one of the latter crossing the line in Section 18 another in Section 30. East, open prairie, rolling and level. Soil, clay, about 6 inches deep, with clay subsoil. Class 2. Surface much broken by numerous deep sloughs and ponds.—*A. G. Cavana*, 1883.

Open, rolling prairie. Soil, classes 1 and 2. Several ponds occur, and in Sections 14 and 15 a couple of large salt lakes. Eagle Hills cross the township on the west side. They are about 200 feet above the prairie level.—*J. S. Dennis, jun*, 1878.

Surface, hilly and broken, the higher portions being surmounted with stones and boulders. Water fresh. Soil, light.—*W. A. Ashe*, 1882.

- 38. Outlines.**—The surface is of a very heavy-rolling character. The sloughs are deep but the water is generally fresh and good. The north-western part of the township is heavily timbered. The soil is generally first and second class. Some of the peaks of the hills are stony and gravelly. This township would make excellent grazing land, as it affords excellent shelter for stock, and the grass

is luxuriant in the ravines and gullies. Cart trail to Battleford crosses the township. East, soil, clay loam, from 6 to 10 inches deep, with a clay subsoil. Class 1. In Section 36 there is a good sized creek, average width 10 feet, and 18 inches deep, flowing in a north-easterly direction.—*A. G. Cavana*, 1883.

North, rolling and broken prairie. Water may be obtained in sloughs.—*H. H. Robertson*, 1884.

- 39. Outlines.**—The north portion of the west boundary is prairie, but is bluffly afterwards, and, going south, has very heavy timber. The soil is good, except on the ridges and hills, which are composed of gravel.—*H. D. Ellis*, 1883.

The surface of the eastern part of the township is open and rolling. Sloughs are numerous. There are clumps of timber on the west side of the township. The soil is generally first class.—*A. G. Cavana*, 1883.

Sub-division.—Rolling prairie, rather high and heavy to the west. The surface is fairly supplied with lakelets, ponds and marshes; some of the water is bad, but the greater part is good and fresh. Most of the margins of the wet areas are surrounded with poplar and willow. The south-west lies in the Eagle Hills, where there are large bluffs of poplar, which are particularly thick in the south-west quarter of Section 6. The soil throughout the township is well adapted for either farming or grazing. The Battleford trail crosses the north-east corner.—*H. H. Robertson*, 1884.

- 40. Outlines.**—North, rolling prairie. Heavy poplar and balm of Gilead in the valley of the Saskatchewan River, near the west boundary.—*G. B. Abrey*, 1882.

For the first two miles going south along the west boundary there is good land and level prairie; then the land becomes rolling and bluffly. The soil is good.—*H. D. Ellis*, 1883.

The North Saskatchewan River enters at the north-west corner and crosses the township in a south-easterly direction. There is a belt of poplar along the river, and a portion of the township north of the river is dotted with clumps of poplar. Part of the township south of the river is more open. The surface is rolling, and the soil first class. The east slopes to the river, which flows out between Sections 12 and 13. There is excellent timber in coulées and belts, suitable for building. The river at this point is 30 chains wide, and the current about 4 miles per hour. The banks are 150 feet high. The telegraph line crosses through Section 1.—*A. G. Cavana*, 1883.

Sub-division.—Beyond the influence of the river, the surface is rolling and undulating. The Battleford trail and the telegraph line cross the township. There are a number of clear-water ponds in the south, but generally the surface and soil classes 2 and 3, dry and broken by the Saskatchewan River, and generally poor for farming purposes. There is plenty of wood for fuel, but a scarcity for building purposes.—*H. H. Robertson*, 1884.

- 41. Outlines.**—West, rolling prairie, dotted with clumps of poplar and willow. Soil, clay loam, 6 inches deep, clay subsoil. Class 1.

Some large sloughs, fringed with willow. In Section 6 is the North Saskatchewan River, here over 50 chains wide, with large sand bars and islands. On the islands grow small poplar and willow, poplar from 2 to 6 inches diameter.—*A. G. Cavana*, 1883.

Rolling prairie along the south boundary. Heavy poplar and balm of Gilead grow in the valley of the north branch of the Saskatchewan River, near the west boundary.—*G. B. Abrey*, 1882.

Sub-division.—Good second class sandy loam, fair for farming, but better for grazing, as the grass is very good between the thick bluffs which cover much of the township. There are a few wet sloughs, in which the water is good. The Saskatchewan River breaks on Section 6, with broken banks and poor soil in the vicinity. There is a fair supply of wood for fuel, fencing and building purposes, which consists of poplar, some willows, and a few balm of Gilead. Towards the east it is open prairie, with very little water.—*H. H. Robertson*, 1884.

- 42. Outlines**.—West, rolling prairie, dotted with clumps of willow and small poplar. Sloughs are numerous, and are generally fringed with willow. Soil is clay loam, from 4 to 6 inches deep, with clay subsoil. Class 1. Poplar is generally from 2 to 6 inches in diameter.—*A. G. Cavana*, 1883.

South, rolling and undulating prairie. Little timber and several sloughs.—*H. H. Robertson*, 1884.

- 43. Outlines**.—Is heavy-rolling, open prairie, for the north half, but southwardly it becomes undulating at correction line. The soil ranks first class, and is clay or clay loam, with clay subsoil, excellent for wheat cultivation. There are ponds and hay marshes with good water. There is a large lake, with good water, in Section 7, which extends westerly. At its east end are some bluffs of poplar. The Fort Pitt and Carlton trail crosses in the southern half of this township.—*P. R. A. Belanger*, 1884.

- 44. Outlines**.—North, rolling and level prairie. Soil, black and clay loam, from 8 to 16 inches deep, with clay subsoil. Class 1. Several sloughs were crossed. Section 31 is very much broken by steep hills. Brush is found growing around the sloughs.—*W. A. Ashe*, 1883.

Is open prairie, gently-rolling or undulating in the east half, and heavy rolling and somewhat hilly in west half. The soil is clay or clay loam, with clay subsoil, and ranks class 1. It is excellent for wheat. There is good water in many hay marshes and ponds, but some of the latter are alkaline. Patches of willows and small poplar appear here and there in the interior of the township.—*P. R. A. Belanger*, 1884.

- 45. Outlines**.—Hilly country. The hills are, in general, 80 feet high. Lakes and ponds—generally alkaline—are found in nearly every hollow. This township is nearly all open prairie, except the eastern part, which is bluffy prairie. Very few bluffs, except at the foot of hills, are met with in the western part. The soil is very good black sandy loam, but is generally very stony on top of the hills. Grazing is very poor, except around lakes or ponds, at which places it is good.—*J. I. Dufresne*, 1884.

Southwards, the soil, generally, consists of an excellent sandy loam on a clay subsoil. Poplar, suitable for building, fencing and fuel, was found.—*W. A. Ashe*, 1883.

46. *Outlines*.—This township is generally level prairie, except in the extreme north, and also near the east boundary, where it is rolling. A creek running west crosses Section 6. The soil in the level parts is a first class black sandy loam, and ordinary good sandy loam is found adjoining the north-east boundaries. Bluffs of poplars and little scrub willows are seen on the eastern part. The rest is open prairie. The supply of water is good.—*J. I. Dufresne*, 1884.

47. *Outlines*.—Rolling country, with good soil. This township is prairie and bluffs of poplars, 2 to 4 inches in diameter, with considerable scrub willows. Water is plentiful.—*J. I. Dufresne*, 1884.

48. *Outlines*.—North, Meeting Lake extends over the east half of Section 33, all of Sections 34 and 35, and the west half of 36. Remainder of the line the country is rolling and level. Class 2. Thick bluffs of poplar, from 6 to 8 inches diameter, and some large spruce, were found.—*W. A. Ashe*, 1883.

This township is rolling country, with very good black loam soil. The northern part appears to be all wooded; it is so for $2\frac{1}{2}$ miles on the west boundary, and along the whole east boundary. In the west the poplars average 6 inches in diameter, but are smaller in places in the east, although a good growth of spruce is visible. The remainder of the township is generally burnt scrub. Water is abundant in the northern part, but seems scarce in the centre.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XIII.

- 9. Outlines.**—West, rolling prairie, falling to the north. There are two small alkaline lakes. A small creek runs through a valley half a mile wide and 100 feet deep, probably a branch of Old Wives' or Swift Current Creeks. North of the creek the land is hilly, and broken by numerous deep gullies. The soil is very dry and hard clay, with a great deal of stone and gravel. The east is undulating prairie. Old Wives' Creek runs through this township. At the time of survey this creek was a succession of pools, and at this point is enclosed in cut clay banks, 20 feet high. The soil is a sandy loam, with little or no grass. The Cypress Hills trail crosses the north.—*A. F. Cotton*, 1883.

Sections 5 to 3 are gently-undulating, and the soil better than in Range 14. A stream is here crossed several times, flowing north, likely to Old Wives' Creek. The stream is bounded by gravel banks 50 feet high.—*T. Fawcett*, 1882.

- 10. Outlines.**—The north half of the west boundary is undulating prairie, with a few dry sloughs. South half, rolling, and broken by a few gullies. The soil is a poor sandy loam in the north half, and clay in the south. Class 3. The east is undulating prairie. The soil is clay, with little or no grass.—*A. F. Cotton*, 1883.
- 11. Outlines.**—The west is undulating and rolling. The soil is a clay loam, about 6 inches deep, on a clay subsoil; class 3. In Sections 31 and 6 an old trail was crossed. No surface water along this line. The east is gently-rolling. There is a small creek in Section 36, having a moderate current, with clear and sweet water. This is probably a branch of Old Wives' Creek. The soil is a clay loam.—*A. F. Cotton*, 1883.

- 12. Outlines.**—The west is undulating, with a few dry sloughs. The soil is a poor sandy loam in the north half and clay in the south. The east is gently-rolling, with a clay loam soil. There are no creeks and very little surface water. A trail to the Cypress Hills crosses the township.—*A. F. Cotton*, 1883.

North, a fine tract of undulating prairie, the soil being of excellent quality and well adapted to agricultural purposes. Water mostly alkaline.—*W. T. Thompson*, 1882.

- 13. Outlines.**—The ground has many deep ravines, which open towards the valleys of Swift Current Creek and Goose Lake. Water is very scarce, except springs of clear water in some of the numerous ravines named. Wood was found in small quantities in three or four ravines on the south-east of Goose Lake, but it is only good for fuel. The soil is third class.—*A. C. Talbot*, 1882.

Surveyed the east and the south of this township, and find it excellent undulating prairie, with a soil of good quality and

well adapted for agricultural purposes. The water is mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Surface, level prairie. Soil, sandy loam, of a depth of 12 inches, and class 1. Well adapted for the cultivation of root crops of all kinds. In dry seasons water is scarce, but good.—*H. Kerr*, 1883.

14. *Outlines*.—The east is undulating, with an excellent soil for farming purposes, but water is somewhat scarce.—*W. T. Thompson*, 1882.

Surveyed the north, south and west boundaries. The surface is rolling and level. A trail crosses the line in Section 2, and from there a branch goes to Section 31, and another to Section 36. There is a small creek flowing north through Section 5, and another through Section 33. At this point, and to the east, there are several marshes, but water generally is scarce, except in springs in some of the numerous ravines. The watershed of the township is towards Swift Current Creek and the Valley of Goose Lake. The soil is third class.—*A. C. Talbot*, 1882.

Sub-division.—Soil, class 2, generally sandy loam, 5 to 8 inches, on sandy subsoil and clay of 6 inches, on gravelly clay subsoil; better adapted for root crops than grain. No bush, and water scarce.—*H. Kerr*, 1883.

- 15.—*Outlines*.—West, Swift Current Creek crosses Sections 18, 19, 30 and 31. The water is good. Another creek, at the time of survey almost dry, crosses Section 7. A trail from 19 to 34. The western two or three miles are broken by deep ravines extending back from the Swift Current Creek. The soil is generally light clay and sandy loam. Classes 2 and 3. The crossing of the Canadian Pacific Railway is on Section 30. Several settlers located here. Two small bluffs of soft maple on Section 18. Sections 36, 35 and 34 are very stony. Classes 3 and 4. Land along the remainder of the line is 2nd and 3rd class. Subsoil, gravelly and clay loam. In Section 33 a large marsh was passed.—*J. G. Sing*, 1882.

South, rolling and level prairie.—*A. C. Talbot*, 1882.

Sub-division.—There is a large, deep coulée crossing Section 36 and draining towards Rush Lake. This ravine dries as the summer advances. The north bank is cut, and shows the following formations, which were measured from the surface downwards. Red clay 4 feet, gravel 6 feet, white clay 10 feet, red clay 25 feet. South of the coulée there is a dead level plateau, which is excellent land for either farming or grazing.—*T. Fawcett*, 1882.

Sub-division.—Surface equally divided between level and undulating. Soil, sandy loam of deep and excellent quality. Swift Current River runs through the north-west sections, and on Section 30 is crossed by the Canadian Pacific Railway. The water is good, and does not dry up; on the east bank there are two clumps of maple bush, but no timber elsewhere. The Fort Walsh trail passes through the township.—*H. Kerr*, 1883.

16. *Outlines*.—The southerly portion is very much broken by deep ravines, the surface being very stony. The portion lying west of Swift Current Creek is better adapted for agricultural purposes,

the surface being more even. The soil is a sand and clay loam, of good quality. West, the subsoil is generally clay loam; classes 1 and 2. Several ridges and hills; no water. Sections 1, 2, 3, 6 and 7 are very stony; classes 3 and 4. Land along the remainder of the south is second and third class. Fort Walsh trail crosses in Section 3 and Swift Current Creek in 5. In Section 4 is a large marsh.—*J. G. Sing*, 1882.

Southward, along the east boundary, the first half of the township presents a gradual inclination to the Swift Current, the soil being a rich clay loam. Some small bush grows on the banks of the stream, but no timber of any account. The south bank is very high and steep, and is cut by numerous coulées and water-courses. Beyond the bank the surface retains its broken, hilly appearance. Fresh water marshes are of frequent occurrence; pasture excellent. The north boundary is undulating prairie, with soil of good quality. Buffalo grass grows in abundance, retaining its dark green appearance, while the surrounding grasses present a dry and parched contrast.—*T. Fawcett*, 1882.

Sub-division—Surface, undulating, with a few dry ravines. Soil, a deep sandy loam of good quality for cultivation, generally class 1. There is wood of any kind. Swift Current River enters on Section 5 and leaves at Section 24; contains good water and does not dry up; it is skirted on the south by the Canadian Pacific Railway and the Fort Walsh trail. In dry seasons in other parts of the township, water is scarce. Lonmay Station, of the Canadian Pacific Railway, is situate here.—*H. Kerr*, 1883.

- 17. Outlines.**—West, rolling prairie. The soil is about equally divided between sandy loam and clay loam, with a sandy subsoil.—*H. B. Proudfoot*, 1883.

As Swift Current Creek courses through the township adjoining eastwards, and not far from the eastern boundary of this township, this portion is much broken by ravines and coulées. Swift Current Creek crosses into the township in Sections 25 and 36, as also the Qu'Appelle trail. At this point the banks of the creek are steep and high, intersected by several deep coulées, and composed of rich red clay. There is some excellent spring water to be had here and some wood in the coulées. The south is, for the most part, an undulating prairie, and possesses a soil of fine quality, on which there is an abundant growth of buffalo grass. Surface water scarce.—*T. Fawcett*, 1882.

Sub-division.—This township is chiefly rolling, but sometimes hilly. The soil is a rich sandy loam, on a sandy subsoil. The north and central parts, possess some marshes; in the south there are two or three very small creeks, and in the north-east there is Swift Current Creek, but otherwise watering places are few. There is no timber, except in the north-east corner, where the Qu'Appelle trail crosses the creek.—*H. H. Robertson*, 1883.

- 18. Outlines.**—North, rolling prairie. Soil, clay loam, from 4 to 6 inches deep, with clay subsoil; class 2. Numerous ravines and a few grass swamps. West, hilly prairie, very stony in places, and having numerous grass swamps and ponds in the small valleys.

Swift Current Creek runs north through this township. The valley of the creek at the north boundary is about three-quarters of a mile in width, and about 200 feet deep. The soil is about equally divided between sandy loam and clay loam, with a sandy subsoil.—*H. B. Proudfoot, 1883.*

Surveyed the eastern boundary. The eastern sections possess excellent land, fit for all purposes of agriculture. The surface is rather high rolling, and in the depressions are numerous marshes, especially in the northern half. Swift Current Creek flows north-west from the south-east corner.—*T. Fawcett, 1882.*

Sub-division.—Generally a rolling prairie, more interspersed with marshes than No. 17. The soil is a sandy loam, graduating to pure sand on the hill tops. The bottoms generally consist of a richer soil. The land is very suitable for farming. Swift Current crosses the township with a west of north course from the south-east corner.—*H. H. Robertson, 1883.*

- 19** *Outlines.*—Mostly gently-rolling prairie, heavy clay soil. The northerly part of this township is considerably cut up with ravines running out from the river. The township is traversed by the Swift Current Creek, a small stream, having very high and rugged banks, and good water. No timber, except a few small groves of poplar in the ravines and along the banks of the Swift Current Creek. A lake, 18 chains wide, in Section 6.—*L. Bolton, 1882.*

South, rolling prairie. Soil, clay loam, from 4 to 6 inches deep. Class 2. Numerous ravines and a few grass swamps.—*H. B. Proudfoot, 1882.*

Going south along the east boundary the first two sections are rough and hilly, being in the north and south bank of the Saskatchewan River, and lateral ravines. The remaining four sections are composed of good arable land.—*E. Bray, 1882.*

Sub-division.—Generally rolling prairie, with very broken ground in the vicinity of Swift Current Creek. Soil varies from a rich sandy loam to mere sand and gravel. Some sections are excellent farming land, whilst others are only fit for grazing purposes.—*Robertson and Talbot, 1883.*

- 20.** *Outlines.*—South, rolling prairie, with occasional marshes of good water, and fair to good soil. The Saskatchewan here, with sand bars, is 650 yards wide. Rough hills, about 350 feet high, with deep-cut ravines, characterize the banks. The water is from a few inches to 20 feet deep. Sections 36, 25, 24 and 13 are good rolling land. Remaining two sections, 12 and 1, are rough and hilly, being on the north and south banks of the Saskatchewan River, and adjoining ravines.—*E. Bray, 1882.*

Crossed by the Saskatchewan River with deep gorgy banks, breaking the surface, on either side, for miles. The valley is over 300 feet deep and an average width of about three miles. The river is about 10 chains wide and of varying depth, with a two mile current. Very little timber on the river, but some cottonwood and poplar in the ravines. Vegetation is luxuriant in the valley and ravines, and pasturage is excellent. Towards the

western portion the land south of the river is broken and stony, and class 3.—*L. Bolton*, 1882.

Sub-division.—Some sections are good for farming, but a great deal of rich clay and sandy loam surface is broken up in every direction by large gullies, which render ploughing difficult. The Saskatchewan River divides the lower tier of sections. Owing to this, the south is rolling, broken and hilly by turns. Soil, clay loam, about 12 inches deep, with sand subsoil. Class 3. Swift Current Creek crosses the line in Section 4.—*Robertson and Talbot*, 1883.

21. *Outlines*.—The northerly two-thirds of the surface is much broken by hills and by sloughs in the valleys. The luxuriant growth of grass around the numerous sloughs provides excellent grazing. The soil is a very rich loam, with clay subsoil, but owing to the extremely broken character of the country it is unsuited to agriculture. The southern and western portions open out into a level plain, covered with a scant growth of grass, the soil being a very moist, sticky black clay, which, if properly drained, would prove excellent for cultivation, the only drawback being the total absence of wood, of which there is none nearer than the river, between five and six miles south.—*T. R. Hewson*, 1883.

East, country is rolling and hilly. The soil, however, is of good quality, but on account of its rough character this tract of land is more suitable for grazing than for any other purpose. The southern sections are more level towards the west, but have very little surface water.—*E. Bray*, 1882.

Sub-division.—Is very hilly, excepting a narrow strip through the north and south, which is well adapted for agriculture. The remainder is more suitable for pasturage, as small lakes and marshes are numerous and well distributed. The soil on the hills is generally gravelly, on clay subsoil.—*S. M. Starkey*, 1883.

22. *Outlines*.—The surface is much broken by hills, and by sloughs in the valleys. The luxuriant growth of grass around the numerous sloughs and lakelets furnishes excellent grazing. The soil is a very rich loam, with clay subsoil, but owing to the extremely broken character of the country it is unsuited to agriculture. South-west, the soil is a very moist, sticky black clay, which, if properly drained, would prove excellent for cultivation. In the north the soil is sandy loam, from 8 to 10 inches deep, with sand and gravel subsoil. Class 2. No wood.—*T. R. Hewson*, 1882.

East, rolling and hilly. The soil, however, is of good quality, but very rough, and more suitable for grazing than agriculture.—*E. Bray*, 1882.

Sub-division.—This township is well adapted for grazing, as there are numerous swamps, lakes and lakelets in every direction, around which the grass is luxuriant. The general surface is hilly, with here and there a strip of rolling prairie. There is no wood.—*S. M. Starkey*, 1883.

23. *Outlines*.—North, the country can only be rated as third class, except for stock raising. Large sloughs are very frequent, with good grazing, in all cases, around them. The soil is principally

loam, with some gravel and stones scattered over the ridges. West, high broken land. The ridges here have a definite trending to the north-west and south-east. A great deal of water was found in the hollows. The soil varies from a sandy to a clay loam, with gravel and stone on the ridges. The country, generally, is well adapted for stock.—*J. F. Garden*, 1882.

The east side is second and third class, and consists of rough, hilly prairie, with numerous high knolls and ridges, with considerable stone (boulders) and a plentiful supply of ponds and grass swamps.—*T. Kains*, 1882.

South, hilly; numerous sloughs. Soil, sandy loam, 8 to 10 inches deep. Class 2.—*T. R. Hewson*, 1882.

Sub-division—Similar to Township 22 of this range, but having a more gravelly soil and larger lakes.—*S. M. Starkey*, 1883.

- 24. Outlines.**—The east of this township, and the east half of the north, are second class, and rough, hilly prairie, with numerous high knolls and ridges surmounted with boulders. In the bottoms there is a plentiful supply of ponds and grass swamps. The north-westerly sections consist of a beautiful valley of first class land, forming a level plain.—*T. Kains*, 1882.

West; high, broken land. The surface of the country is a succession of hills and hollows, the elevation being from 50 to 80 feet. Large sloughs and ponds are very frequent, with good grazing in their vicinity. The soil is principally loam, with some gravel. The country is first class for stock raising. South, the country rates as third class, except for stock raising. Large sloughs are frequent, with good grass around them. The soil is loam, with gravel and stones over the ridges.—*J. F. Garden*, 1882.

Sub-division.—Suitable for grazing only; very broken, with numerous grass swamps and hills. Soil, gravelly, except in valleys where it is class 1. No wood.—*S. M. Starkey*, 1883.

- 25. Outlines.**—West, rolling and undulating prairie. Soil, sandy loam, 6 inches deep, sand subsoil. Class 3. In Section 31 is an alkaline creek. Some places were stony, with numerous surface boulders. Water rather scarce. East, rolling and hilly. Soil, sandy loam. Class 3. Section 12 has a lake and a pond.—*J. A. Maddock*, 1883.

South, the east half, along Sections 1, 2 and 3, is second class, and consists of rough, hilly prairie, having the ridges covered with many boulders, and having also a plentiful supply of ponds and grass swamps. The west sections are in a beautiful valley of first class land, which widens out northwards into a large level plain.—*T. Kains*, 1882.

Sub-division.—Level prairie. Soil, heavy clay on clay subsoil. Water scarce, and no wood.—*J. Bourgeois*, 1883.

- 26. Outlines.**—West, gently-rolling prairie. Soil is a dark loam, from 4 to 6 inches deep, with clay subsoil. Classes 1 and 2. A couple of alkaline sloughs were crossed, one in Section 7, the other in 18. A chain of alkaline lakes runs through this township in a north

easterly direction. Towards the east it is level prairie. Soil, dark loam, about 6 inches deep, clay subsoil. Class 1. A large marsh was crossed in the northern half of Section 1.—*J. A. Maddock*, 1883.

Sub-division.—Level and undulating prairie, with second class soil, composed of light and heavy clay, with clay subsoil. Good water is scarce. An alkaline lake is situated in Sections 33, 34, 28 and 29. This township is not well adapted to agricultural purposes. No wood.—*J. Bourgeois*, 1883.

- 27. Outlines**.—Is undulating prairie, sloping to the south. A chain of alkaline sloughs, connected by a small creek, runs south-west through the township. In the west the soil is sandy loam, 6 inches deep, with sand subsoil. Class 3. In the east the soil is a dark loam, about 6 inches deep, with a clay subsoil. Class 1. A small alkaline creek, nearly dry, in Section 24. Some marshes and sloughs in the east, but none west.—*J. A. Maddock*, 1883.

South, undulating and level prairie. Line crossed end of a lake in Section 3.—*J. Bourgeois*, 1883.

- 28. Outlines**.—The north-east part is level prairie. Westwards it is more rolling, and finally undulating. Soil, generally a clay loam. Class 1; some class 2. Excellent for pasturage and farming. Water is scarce, the marshes being few in number.—*T. Fawcett*, 1883.

This township consists of level and rolling prairie. The soil is a sandy loam, about 6 inches deep, on a sand subsoil, and classes 2 and 3. There is a large marsh at the corner between Sections 1 and 12, but generally water is scarce. None whatever was crossed along the west line.—*J. A. Maddock*, 1883.

- 29. Outlines**.—Generally level, with portions of rolling prairie. The soil, east and west, consists of a clay loam, about 7 inches deep, on clay and sand subsoils, and ranks class 2. There is no surface water of any account to be seen.—*J. A. Maddock*, 1883.

Along the south the country is undulating, and has a clay loam soil. Marshes are few and water is scarce.—*T. Fawcett*, 1883.

- 30. Outlines**.—This township may be described similarly to Township No. 29 of this range.—*J. A. Maddock*, 1883.

- 31. Outlines**.—West, open, rolling prairie. Section 19 is third class, being entirely occupied and very much broken by the deep valley of Eagle Creek. The creek is wide, deep, muddy and saline. Sections 6, 7, 18, 30 and 31 are first class, and have a sandy and clay loam soil. East, open, rolling prairie, with a few fresh-water marshes. Section 36 is classes 2 and 3. The balance of the line southwards is class 1. The soil is generally clay loam. Eagle Creek, winding about in a valley nearly a mile in width, and depressed about 120 feet below prairie level, is crossed by the line in Section 36.—*F. W. Wilkins*, 1883.

- 32. Outlines**.—The easterly half of the north boundary is slightly-rolling prairie, and the soil is of a very superior quality; but the westerly half can only be ranked as second class.—*E. Bray*, 1883.

West, open, rolling prairie. Sections 6 and 7 are first class. The balance of the line is second and third class, the soil getting lighter to the north. The beds of small creeks, with easterly courses, were crossed on Sections 7 and 18. East, open, rolling prairie, with sandy loam soil, mostly first class. A very small creek, in a deep and narrow valley, with a little wood in it, crosses on Section 12.—*F. W. Wilkins*, 1883.

- 33. Outlines.**—Rolling prairie. Soil, clay and sandy loam, from 5 to 15 inches deep, with sand subsoil. Class 1 eastwards; class 2 westwards. Small brush was found in Sections 4, 5 and 6. In Sections 1 and 2 a stream crosses the line. A couple of marshes were seen.—*E. Bray*, 1883.

The western part of this township consists of rolling to heavy rolling prairie, with a light sandy soil. Fourth class. Several small alkaline lakes were visible from the line. The east is rolling and knolly, with a good many ponds and marshes in the north, some of which are fresh and some are saline. Sections 25 and 36 have patches of stone and gravel. Second and third class. Sections 1, 12, 13 and 24 are all first class.—*F. W. Wilkins*, 1883.

- 34. Outlines.**—West, very hilly country, and in general broken and stony. Second and fourth class. Some very high ridges were crossed. The southern edge of the Coteau du Missouri is apparently met with at the south side of Section 6, or in the north part of Section 31, of the last township. This developes, in Sections 1, 12 and 13, to a high range of hills lying easterly and westerly, and about 6 miles in length. The country through these hills is very much broken, and nearly covered with mixed boulders, stones, &c. Fourth class. Sections 24 and 36 are rolling prairie, and first-class. Nearly the whole of Section 25 is occupied by a saline lake of perhaps 4 miles in length.—*F. W. Wilkins*, 1883.

- 35. Outlines.**—West, hilly country, a good deal broken by ponds and marshes, and very stony in places. Third class. There is a small creek in a deep valley on Section 30. Its course is easterly to a lake in the north-west of the township. Across Sections 1, 12, 13 and 24 is very hilly prairie, rising sharply to the north, and second class. Sections 25 and 36 are very much broken and very hilly. Third class.—*F. W. Wilkins*, 1883.

- 36. Outlines.**—North, the soil is light, but very much broken up with hills, the hill tops being covered with stones and boulders. Water, generally, is good and fresh.—*W. A. Ashe*, 1882.

West; knolly, hilly and gravelly country; very much broken by ponds and marshes, mostly saline. Third and fourth class. The line on Sections 6 and 7 crosses a high, prominent ridge of very coarse sand and gravel. East, entirely in very hilly country (Coteau du Missouri), with some nice valleys, but generally very much broken by marshes and ponds, and very stony. Third class throughout.—*F. W. Wilkins*, 1883.

- 37. Outlines.**—Open, rolling prairie. Soil, light sandy loam. Classes 1 and 2. Cart trail crossed in Section 18.—*J. S. Dennis, jun.*, 1878.

Southwards, the soil is light, and the surface is very much

broken up with hills, which are generally surmounted with stones. All surface water is fresh. Timber in considerable quantities, and in size as large as 1 foot in diameter, is reported to exist in the northern portion of the township—*W. A. Ashè*, 1882.

The surface is broken and hilly. The sloughs are numerous, some fresh and some alkaline. Good pasture land. The soil is second class, occasionally first class in the valleys. The west is rather better and more adapted for farming than the east. The surface there is open and rolling, and the soil is a clay loam of a good quality.—*A. G. Cavana*, 1883.

- 38. Outlines.**—North, open and hilly prairie. Poplar and a few birch. Cart trails were crossed in Sections 3, 34 and 36. In Section 36 the line was crossed by a creek. The line enters a lake in western end of Section 31.—*L. M. Dechesne*, 1884.

The surface is of a heavy-rolling character. The northern part of the township is heavily wooded with timber of suitable dimensions for building purposes or fuel. The soil is second class. Westwards the surface is heavy-rolling. Soil is first and second class. Sloughs are numerous. Trail in Section 30. Eastwards the surface is hilly. Soil is second class. Clumps of timber suitable for building purposes. Cart trail to Battleford crosses Section 12. Creeks in Sections 24 and 25.—*A. G. Cavana*, 1883.

- 39. Outlines.**—North, rolling and broken. Creeks in Sections 35, 34 and 33. Timber and brulé found along this line.—*H. H. Robertson*, 1884.

Going south, on the west boundary, the country is broken by deep ravines, and heavily timbered with poplar. In places there is a little birch. In the bush land there are many large lakes. In Section 18 the prairie begins. The remainder of this line is broken and hilly, and full of ponds and swamps. The soil is good, but stony in places, being composed chiefly of a sandy loam, with gravel bottom. In the bush is a deep, rich, black soil. Good water. East, the north portion of this line is prairie, but is bluffly afterwards. Going south there is very heavy timber. The soil is good, except on the ridges and hills, which are composed of gravel.—*H. D. Ellis*, 1883.

Sub-division.—Is generally rocky and hilly, and broken by several small lakes and ponds, in which the water is good. Soil, black sandy loam, averaging from 5 to 8 inches in depth, and with a sandy subsoil. Good for agriculture and stock raising, owing to the fresh water which can be found almost everywhere. It is covered with poplar and willow, averaging in size from 2 to 8 inches in diameter, good for fuel and fencing, and a very large quantity fit for building purposes.—*L. M. Dechesne*, 1884.

- 40. Outlines.**—North, prairie, very rolling and stony. The soil is a sandy loam, with some ponds. Bluffs of small poplar occur towards the westerly end of the boundary.—*G. B. Abrey*, 1882.

West, covered with poplar bluffs, in which there is some fair sized timber. The country for the first 3 miles going south is rolling, with a gradual rise to the south. After that it is broken

by deep ravines, and heavily timbered with poplar. In places there is a little birch. In the bush there are many lakes. The soil is a deep, rich, black loam, and there is good water. For the first 2 miles on the east boundary going south there is good land and level prairie. Then the land becomes rolling and bluffy. The soil is good.—*H. D. Ellis*, 1883.

Sub-division.—Rough and broken, being on the north-east incline of the Eagle Hills. There are numerous clumps of poplar suitable for building scattered about. There is a number of running creeks, several of which are alkaline. This township is better for grazing than farming, as the grass is good, and there are pea vines and vetches growing 3 and 4 feet high. The Battleford trail and the telegraph line cross the north-east corner.—*H. H. Robertson*, 1884.

41. *Outlines*.—The North Saskatchewan River flows across this township in a south-westerly direction, leaving it at the south-east corner. The banks of the river here are about 100 feet high, timbered on each side with poplar 2 to 6 inches in diameter. The southern part of the township is thickly dotted with clumps of small poplar, and the northern part with poplar sufficiently large for rails or firewood. The soil is first class, being a clay loam, from 3 to 12 inches deep, on a clay subsoil.—*A. G. Cavana*, 1883.

The west is rough, broken, hilly and stony. The telegraph line and the main trail to Battleford cross south of the Saskatchewan River.—*H. B. Proudfoot*, 1883.

Southwards, very rolling and stony prairie. Soil, sandy loam. There are some ponds, and bluffs of poplar in the south-west.—*G. B. Abrey*, 1882.

Sub-division.—The soil classes 2 and 3, and is a sandy loam, with numerous boulders in the southern part. The Saskatchewan River crosses from Sections 1 to 31. The north is good for grazing. There is no timber, except some near the river. The islands, with the exception of one in Section 31, are covered with willows. The island in Section 31 is covered with poplars, 6 to 15 inches in diameter, and a few balsams of Gilead.—*H. H. Robertson*, 1884.

42. *Outlines*.—The surface is rolling. The southern part of the township is timbered with clumps of poplar, 2 to 6 inches in diameter. The northern part is open prairie, excepting where willow scrub surrounds the sloughs. The soil is first-class clay loam, from 3 to 6 inches deep, on a clay subsoil.—*A. G. Cavana*, 1883.

West, rolling and level prairie. Swamps bordered with willows.—*H. B. Proudfoot*, 1883.

Sub-division.—Is undulating prairie, with a black sandy loam and clay subsoil; good for cultivation. It is partly covered with bluffs of poplar and willow, averaging in size from 2 to 5 inches diameter, good for fencing and fuel only. Water is very scarce, though it could be got by digging 10 or 15 feet. As a general rule, it is good for stockraising, and some parts for cultivation.—*L. M. Dechesne*, 1884.

- 43. Outlines.**—West, rolling prairie, having bluffs of poplar, with occasional sections of prairie. The soil is first class. Large alkaline lake was crossed in Section 30, and the trail to Fort Pitt in 31.—*J. K. McLean*, 1883.

East, rolling and level. Large lake and marsh in Sections 1 and 12. Fort Pitt and Carlton trail in Section 13.—*P. R. A. Belanger*, 1884.

South, undulating prairie. Small bluffs of poplars and willows.—*L. M. Dechesne*, 1884.

- 44. Outlines.**—North, broken and hilly prairie. Soil, black and clay loam, from 4 to 10 inches deep, resting on a subsoil of clay and pebbles. Class 2. Sloughs are generally fringed with small poplars, 3 inches in diameter. Hills are from 50 to 100 feet high; scattered bluffs of poplar. Section 31 very much broken by alkaline lakes and a large muskeg.—*W. A. Ashe*, 1883.

East, heavy-rolling prairie. Line crosses large lake in Section 13.—*P. R. A. Belanger*, 1884.

West, exceedingly hilly, with poplar scrub, usually on the northerly slope of the hills. Sections 6 and 7 are rolling prairie, and first class agricultural land.—*J. K. McLean*, 1883.

- 45. Outlines.**—Hilly country, with good sandy loam soil. The hills are very numerous, and average from 30 to 40 feet high. Surface stones are in quantities on the tops of those hills. Occasional bluffs of poplars occur. They are more numerous in the western part. Lakes and ponds are very numerous throughout this township, and generally the water in them is good and fresh.—*J. I. Dufresne*, 1884.

South, the soil generally is of a high average, consisting of an excellent sandy loam, with a clay subsoil. There is sufficient poplar for building, fencing and fuel purposes; also good water.—*W. A. Ashe*, 1883.

- 46. Outlines.**—Hilly country, with good sandy loam soil. On Section 6 is a creek, 30 links wide, running west. On Section 7 is a cart trail bearing east and west. This trail is again crossed on Section 12. Surface stones in large quantity appear in places. This township is generally open prairie, interspersed by a few bluffs of poplars. Water is good and abundant.—*J. I. Dufresne*, 1884.

- 47. Outlines.**—Rolling country, broken by several coulées and creeks. The soil is good sandy loam in the western part, and first class; black loam in the eastern part. This township is open prairie, with bluffs of poplars and scrub willows scattered here and there. More wood, however, may be found in the western part. Water is scarce.—*J. I. Dufresne*, 1884.

- 48. Outlines.**—North, rolling and level; well timbered with bluffs of small poplar. Soil is black and sandy loam and clay, from 4 to 12 inches deep, resting on a clay subsoil; stones in places. Classes 1 and 2. In Section 33 a lake containing fresh water was crossed. An old cart trail crosses the line in Section 35. A few sloughs and muskegs were crossed.—*W. A. Ashe*, 1883.

Gently-rolling country, with first class soil. The western part is good sandy loam, and the eastern part is black loam, with subsoil of clay, and in places of sandy loam. The northern half is nearly entirely covered by poplars averaging 6 inches in the north-east, and from 2 to 3 inches in the north-west. The southern half has scrub willows, with openings of prairie; the willows predominating in the south-east, and willows and small poplars in equal proportion with prairie in the south-west. This township appears to be rather dry.—*J. I. Dufresne, 1884.*

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XIV.

- 9. Outlines.**—Gently-rolling prairie. Soil, a loam, about 4 inches deep, on a sandy and clay subsoil; class 2 for farming. There is no wood in the township. A small creek runs south-easterly, from Section 13 to Section 1. At the time of survey, in August, it was stagnant and slightly alkaline. The north-east sections are somewhat stony. Two cart trails cross the township. Fresh water can be obtained anywhere by digging. The soil and climate are adapted to wheat cultivation.—*Dumais and Michaud*, 1883.

Going east along the south boundary, in Section 3, the surface is much broken by hills and ravines, and the soil is rather inferior to the ranges westwards. The hills and ridges are dotted with granite and limestone boulders.—*T. Fawcett*, 1882.

The west is hilly and broken in the south half, and rolling to the north. Old Wives' Creek runs across the south half, but at the summer advances is only a succession of pools. The soil is a poor clay. The east is rolling, falling to the north. There are two small alkaline lakes, also a small creek in a valley half a mile wide and 100 feet deep. North of this, the land is hilly and broken by numerous gullies, and the soil is very dry and hard, and contains a great deal of stones and gravel.—*A. F. Cotton*, 1883.

- 10. Outlines.**—West, rolling prairie, with a poor clay soil, no grass and a good deal of stone. The north half of the east boundary is undulating prairie, with a few dry sloughs. South half, rolling and broken by a few gullies. The soil is a poor sandy loam in the north half, and clay in the south.—*A. F. Cotton*, 1883.

Sub-division.—The south-west half is rolling prairie; the remainder is broken and hilly by the valley and gullies of Old Wives' Creek, which crosses in a south-easterly direction from Section 33 to 13. The soil is a loam, 6 inches deep, on a clay and gravelly subsoil. Class 2 in the south-west, and class 3 in the remainder. No timber. Another creek runs from Section 18 to 13, and water can be obtained anywhere by digging. The township is not inviting, except the south-west, which contains good wheat land.—*Michaud and Dumais*, 1884.

- 11. Outlines.**—The west is hilly prairie. The hills are very steep, with numerous gullies, in which there is scrub, maple and poplar. There is some sandstone good enough for building. The soil is a poor clay and contains a good deal of gravel. Breaking on Section 19, and extending westwards, there is a lake in a valley 200 feet below the prairie. The east is more of a rolling and undulating prairie, with a clay loam soil, about 6 inches deep, over clay, and class 3. Surface water in the east is very scarce.—*A. F. Cotton*, 1883.

Sub-division.—This township is open, rolling prairie. The soil is a loam, from 2 to 4 inches deep, on a clay and sandy sub-

soil ; classes 2 and 3. There is no wood, and surface water is scarce, but the latter can be obtained anywhere by digging. The north is rather better, and will count class 1. Two cart trails cross the township, and a creek flows southwards across the south-west quarter.—*Dumais and Michaud*, 1883.

- 12. Outlines.**—North, fine undulating prairie. Soil excellent, and well adapted for agricultural purposes. Water mostly alkaline.—*W. T. Thompson*, 1882.

East, undulating prairie, with a few dry sloughs. The soil is a poor sandy loam in the north half, and clay in the south.—*A. F. Cotton*, 1883.

Sub-division.—Level prairie. There are some undulations, but very gradual. The soil is a loam, 6 inches in depth, on a sandy loam subsoil, and is first class wheat land. No wood, and no surface water; but the latter can be obtained anywhere by digging. Generally the township has an excellent soil, and well adapted for agricultural purposes. West, rolling and broken prairie, with loam soil 3 inches deep; the subsoil is sandy loam. Class 3 A creek, in Sections 30 and 31, flows south. Numerous gullies, and in Section 6 another creek.—*Dumais and Michaud*, 1883.

- 13. Outlines.**—In the western part the surface is somewhat broken by many ravines, trending to the valley of Swift Current Creek, or to that of Goose Lake. Water, generally, is very scarce, although there are some springs of clear water in several of the ravines. The soil will average class 3. The eastern portion of the township and part of the south is nearly level.—*A. C. Talbot*, 1882.

A fine tract of undulating prairie lies along the south boundary, the soil being of excellent quality and well adapted to agriculture. Water alkaline, generally.—*W. T. Thompson*, 1882.

Sub-division.—Surface, generally, rolling and undulating, with some hilly parts, also some level prairie, which lies to the south-east on Sections 1, 2, 11, 12, 13 and 14. Soil, generally, sandy loam, of various depths and grades, from classes 1 to 3. Good for root crops. There is considerable rock on Sections 8, 9, 16, 17, 20 and 21. Water, in dry seasons, is scarce, and there is no wood or bush.—*H. Kerr*, 1883.

- 14. Outlines.**—Swift Current Creek crosses this township from the south-west corner to the north centre in Sections 33 and 34. All the north is rolling prairie, sloping to the river. The west is also rolling, with a like slope, except Sections 30 and 31, which are very level. The east and south is all rolling prairie. Within the influence of the river there are many deep ravines. Water is scarce throughout the township, except in the creek. The soil is all third class.—*A. C. Tulbot*, 1882.

Sub-division.—Surface rolling and undulating, and, in a few places, broken and hilly. Soil, generally, of good quality for cultivation. Classes 1, 2 and 3, according to position. Swift Current River traverses the township from Sections 6 to 34, and is entered by several smaller streams, all good water, and all fairly distributed over the township.—*H. Kerr*, 1883

- 15. Outlines.**—The north is rolling, with a sandy loam soil. Classes 1 and 2. There is a deep coulée in Section 35, also a marsh. The east is stony and gravelly. Section 1 is rolling; the balance is more uneven, owing to the valley of Swift Current Creek and other ravines. The soil is a sandy loam, and, in places, gravelly, and classes 2 and 3. Swift Current Creek crosses the south-easterly sections, and the Canadian Pacific Railway the second northerly tier of sections. The railway follows a large valley, the soil of which is not of a good quality, being a heavy, stiff clay. On the elevated portions of the prairie the best soil is met with, as it is free from the stones and the gravel of the ravines. Some of these latter are very deep.—*J. G. Sing*, 1882.

South, rolling prairie, sloping toward the river. Swift Current Creek crosses the line in Section 3.—*A. C. Talbot*, 1882.

Sub-division.—Surface, generally undulating, some parts rolling and some level. Soil, sandy loam, mostly deep, and suitable for agriculture. Swift Current River runs through the south-eastern portion of this township, has good water and is entered by several small brooks. On Sections 23 and 24 there is a lake and marsh, the north of which is skirted by the C. P. R., and the south by the Fort Walsh trail. There is no wood or bush. The Swift Current Station (C.P.R.) is located here.—*H. Kerr*, 1883.

- 16. Outlines.**—Going west, on the north boundary, the first three sections descend to an alkaline plain. Water is scarce, and grasses are parched. In Sections 33 and 32 small creek beds drain towards a chain of alkaline ponds, appearing about two miles north from the line. The surface then ascends, the soil improving in the ascent. To the south a ridge of hills runs parallel to the base. From the foot of these several springs of good water exude.—*T. Fawcett*, 1882.

Surveyed west, east and south. The surface is nearly all rolling, with some that is level and some broken by ravines. In the south and the east the soil is a clay and sandy loam, and classes 1 and 2; in the west it will average class 2. Water is scarce everywhere. Sections 1 and 12 are stony, and in Sections 1 and 2 there is a large marsh and a deep, perpendicular coulée. The ravines are all dry.—*J. G. Sing*, 1882.

Sub-division.—Surface, undulating, with some level portions. Soil, sandy loam, generally 12 inches deep, and class 1. Of excellent quality for cultivation. There is a fairly sized lake and some marsh land in the south-eastern part of the township, but elsewhere water is scarce, the ravines, generally, being dry.—*H. Kerr*, 1883.

- 17. Outlines.**—Generally rolling prairie. The soil is about equally divided between sandy loam and clay loam, with a sandy subsoil.—*H. B. Proudfoot*, 1883.

The south-easterly sections are very dry and parched. In Section 3 there is an alkaline flat, and about two miles north of Sections 3, 4 and 5 there are large marshes, to which the whole of the southern sections drain. The south-west sections contain a very fair soil.—*T. Fawcett*, 1882.

Sub-division.—Surface, generally rolling prairie. There are several large swamps. Some are fresh water and some alkaline. Part of the township has a black loam, over an alkali bottom. Part has a sandy loam, and towards the south-east there is much dry sand. Altogether, about half of the township is rich farming land.—*Talbot and Robertson*, 1883.

18. *Outlines.*—North, rolling prairie. Soil, heavy clay, Class 1. Sloughs are very numerous.—*L. Bolton*, 1882.

East and west, hilly prairie, very stony in places, having also numerous grass swamps and ponds in the small valleys. The soil is about equally divided between sandy loam and clay loam, with a sandy subsoil.—*H. B. Proudfoot*, 1883.

Sub-division.—The soil varies from a light sandy loam to mere sand; but owing to the good supply of fresh water, the township is suitable for grazing.—*Robertson and Talbot*, 1883.

19. *Outlines.*—The surface varies from a broken surface in the north to level in the south, the north being cut by ravines running from the river, which gradually die out as they approach the centre of the township. The south-western quarter of the township has many marshes, but along the boundaries elsewhere there is not much water. The soil is generally a heavy clay, and class 1. Section 1 has a small lake and Section 36 is broken and stony.—*L. Bolton*, 1882.

Sub-division—Rolling prairie, broken in places by gullies. Some portions consist of a rich clay loam and some of a dry sand. The former are first class for farming, and contain a plentiful supply of fresh water in the sloughs.—*Robertson and Talbot*, 1883.

20. *Outlines.*—North, rolling prairie, with occasional marshes of good water, and fair to good soil.—*E. Bray*, 1882.

Is traversed by the south branch of the Saskatchewan River, the banks of which are very much broken by deep gorges or ravines running back on either side, in many places for miles. The valley of the river is over 300 feet below the level of the table land on either side, and is very crooked. The average width of the valley, from top to top of the banks, is over three miles. The average width of the river is 10 chains, varying very much in depth, on account of the sand shoals. The current runs about two miles per hour. Soil is heavy clay; in many places there is very little alluvial soil. Very little timber exists along the river, but a few large cottonwoods and some bluffs of poplar grow in the ravines. Numbers of spring streamlets run down the ravines to the river, making the valley a fine pasturage locality. Granite is very plentiful, and crops out all along the valley.—*L. Bolton*, 1882.

Sub-division.—Soil, generally a deep sandy loam on a sandy subsoil. The western portion of the township is rolling, and suitable for farming purposes; but the easterly sections are much broken up by gullies, so that this portion is best adapted for pasturage. The Saskatchewan River courses through the second southerly tier of sections. The banks of the river are high and

much broken. A large sand bar, on Sections 6 and 7, divides the river. No wood.—*Robertson and Talbot*, 1883.

21. *Outlines*.—Two-thirds of the surface is much broken by hills and by sloughs in the valleys. The luxuriant growth of grass around the numerous sloughs furnishes excellent grazing. The soil is a very rich loam, with clay subsoil, but owing to the extremely broken character of the country it is unsuited to agriculture. The southern and western portions open out on a level plain, covered with a scant growth of grass. The soil is a very moist, sticky, black clay, which, if properly drained, would be well adapted to agriculture. Wood may be obtained from the South Saskatchewan River, which is about four miles distant. Sections 30 and 31 are sandy and scrubby.—*T. R. Hewson*, 1883.

As they appeared from the southern boundary, Sections 1 to 4 are gently-rolling, and 5 and 6 heavily-rolling. The soil is classes 2 and 3. A few marshes, but water scarce.—*E. Bray*, 1882.

Sub-division.—The south-western part has a heavy clay soil, and the north-western part has numerous sand hills. The remaining part of the township is very broken. The grazing in the bottoms is good. Two large alkaline lakes occur, and some brush. More suitable for grazing than agriculture.—*S. M. Starkey*, 1883.

22. *Outlines*.—North, rolling and level prairie, with sand hills. West, very hilly country. Soil is a sandy loam, with a sand and gravel subsoil. Class 2. Water in ponds and sloughs. East, hilly prairie, with numerous sloughs. Soil, clay and clay loam, mixed with gravel. Class 2.—*T. R. Hewson*, 1882.

Sub-division.—The southern portion of this township is well adapted for grazing purposes, being well watered. The north and north-western part is inferior for agriculture. A portion of the centre is rolling and level prairie. Sand hills occur on Sections 5, 6, 7 and 8, and scrub poplar and cottonwood brush on Sections 22, 23, 24, 25, 26 and 27, only fit for fuel. Large lake in Sections 3, 4, 5, 8 and 9; probably 1,200 acres in area.—*S. M. Starkey*, 1883.

23. *Outlines*.—West is undulating prairie, extending from the north southward for $3\frac{1}{2}$ miles, where the country becomes high and rolling. The soil varies from a clay loam, in the higher land, to a strong heavy clay, with a scanty growth of grass and but little sod in the lower levels, where there are also indications of alkali. Permanent water, and some stone and gravel exist in the higher land. High, broken lands along the east boundary. The ridges here have a definite trending to the north-west and south-east. A great deal of water exists in the hollows. The soil varies from a sandy to a clay loam, with gravel and stone in the ridges. The country, generally, is well adapted for stock.—*J. F. Garden*, 1882.

South, very hilly country. Soil, sandy loam, with sand and gravel subsoil. Class 2. Section 1 is very broken. Numerous small sloughs were crossed. In Section 4 is a small creek.—*T. R. Hewson*, 1882.

Sub-division.—Only a small part of this township is suitable for agriculture, and is situate on the western side, giving a total

area of about one-quarter of the township. The remaining part is only suitable for grazing, being broken by hills and small lakes.—*S. M. Starkey*, 1883.

24. *Outlines*.—The easterly three miles of the northerly boundary lies in a beautiful valley of first-class land. This valley seems to trend south-west and north-east, forming, to the north, a large level plain. West of this valley there is a range of hills about 150 feet high, which are considerably broken by ponds and swamps. The soil in these hills is first and second class.—*T. Kains*, 1882.

West, the surface is high and rolling, open prairie, and continues so from the north angle southward for about $2\frac{1}{2}$ miles, where it begins to fall gradually to a lower undulating prairie, extending south. The soil varies from a clay loam, in the higher land, to a strong heavy clay, with a scanty growth of grass, and but little sod, on the lower level, where there are also indications of alkali. There is permanent water and some stone and gravel on the higher land. East, high, broken land. The surface of the country is a succession of hills and hollows, with a difference of elevation of from 50 to 80 feet. Large sloughs and ponds are very frequent, with good grazing, in all cases, around them. The soil is principally loam, with some gravel. The east can only be rated as third class, except for stockraising.—*J. F. Garden*, 1882.

Sub-division.—Western part of this township is well suited for agricultural purposes, but the eastern half is hilly and stony, interspersed with small lakes and swamps, and is most suitable for pasturage. In the numerous valleys, however, is to be found good agricultural land.—*S. M. Starkey*, 1883.

- . *Outlines*.—It is hilly from Section 6 to Section 3. The soil in these hills is in many places first class, but most of it is second class. Sections 1 and 2 are in a fine valley, which widens to the north into a large level plain.—*T. Kains*, 1882.

West, hilly prairie, with a number of ponds and hay marshes. Soil is gravelly clay and clay loam, with clay and clay loam subsoil. Classes 1 and 3. Hills are stony on the top. In Section 19 is a large ravine containing small poplar, 2 to 5 inches in diameter, fit for fuel and fencing.—*P. R. A. Belanger*, 1883.

East, rolling and undulating. Soil is a sandy loam, 6 inches deep, with a sand subsoil. Class 3. An alkaline creek in Section 36.—*J. A. Maddock*, 1883.

Sub-division.—Rolling and stony. Soil, heavy clay, clay subsoil, and some parts sandy loam, which is good for agricultural purposes. Water scarce, and no wood.—*J. Bourgeois*, 1883.

26. *Outlines*.—West, level prairie. Soil and subsoil, clay. Class 1. Water scarce. East, gently-rolling prairie. Soil is a dark loam, about 6 inches deep, with clay subsoil. Classes 1 and 2. A couple of alkaline sloughs only. No wood.—*J. A. Maddock*, 1883.

Sub-division.—Undulating and level. Soil, light clay on clay subsoil. Scarcely class 2 for agricultural purposes. Water scarce and no wood.—*J. Bourgeois*, 1883.

- 27. Outlines.**—West, gently-undulating; soil and subsoil, clay. Class 1. A large hay marsh, with water 2 feet deep, covers Section 30 and the southern part of 31.—*P. R. A. Belanger*, 1883.

East, level. Soil, sandy loam, about 6 inches deep, with sand subsoil. Class 3. No water was seen along this line.—*J. A. Maddock*, 1883.

South, level prairie. Soil is a light clay, about 4 inches deep, with clay subsoil. Class 2. No water along this line.—*J. Bourgeois*, 1883.

- 28. Outlines.**—North, rolling and undulating. Soil, clay loam, 8 to 18 inches deep, on clay subsoil. Class 1. The ravines in the north-west are brushy, and a large marshy lake occurs on Section 31. Water fresh and grazing fine.—*T. Fawcett*, 1883.

West, gently-undulating prairie, with clay soil and subsoil. Class 1. Large hay marsh was crossed in Sections 30 and 31.—*P. R. A. Belanger*, 1883.

East, undulating. Soil, sandy loam, 6 inches deep, with sand subsoil. Class 3. No water along this line.—*J. A. Maddock*, 1883.

- 29. Outlines.**—The general surface of this township is rolling prairie. The soil is a clay loam on a clay subsoil, and class 2. The depth of the upper soil is about 6 inches. There is some water in the west, but very little in the east. Fair farming land.—*J. A. Maddock*, 1883.

South, undulating. The soil is a good clay loam with clay subsoil. Water is fresh and abundant in the ponds and marshes. Grasses are luxuriant. Some of the hill sides contain a growth of sage bush.—*T. Fawcett*, 1883.

- 30. Outlines.**—The surface is rolling and undulating. The soil is a clay loam in the west and a sandy loam in the east, in each case about 6 inches deep, on a clay subsoil, and class 2. Water, generally is scarce; in the east there is apparently very little. In the west there is a large marsh in Section 7, and only in the north is there plenty, and that in Eagle Creek, along the northern boundary.—*J. A. Maddock*, 1883.

- 31. Outlines.**—West, open, rolling prairie, with some good sized, shallow, fresh-water marshes scattered along it. Soil, first and second class, generally. The south of Section 6 is very stony, class 4, and in the valley of Eagle Creek. A small watercourse traverses Section 31. East, open rolling prairie. Section 24 is third class, being entirely occupied and very much broken by the valley of Eagle Creek, which is about 150 feet deep. The creek is wide, deep, muddy and saline. Sections 1, 12, 13, 25 and 36 are first class, and have sandy and clay loam soil.—*F. W. Wilkins*, 1883.

- 32. Outlines.**—West, open rolling country, rising to the north. Sections 6 and 31 are second class. Sections 7 and 18 are springy and alkaline land, and fourth class. Sections 19 and 30 are first class, with clay loam soil. The foot of the Coteau du Missouri apparently begins at the south side of Section 19. The country

at this point rises more sharply to the north. East, open, rolling prairie. Sections 1 and 12 are first class. The balance of the line is second and third class, the soil getting lighter to the north. The beds of small creeks, with easterly courses, were crossed on Sections 12 and 13.—*F. W. Wilkins*, 1883.

Going westward, along the northern boundary, the first two miles are rolling and bushy, with a poor and sandy soil. The balance of this line is very fair soil, about class 2. Section 31 is hilly, being the southern slope of the Bear Hills.—*E. Bray*, 1883.

- 33. Outlines.**—This township lies in what is known as the Bear Hills. The west is heavy-rolling and hilly, much broken by ponds and marshes, and very stony in places. The soil is mostly class 3. There is a small creek in a deep valley in Section 6; course east. The eastern portion is rolling to heavily-rolling, with a light sandy soil, and generally fourth class. There are a number of alkaline lakes on either side of this line.—*F. W. Wilkins*, 1883.

Section 1 and 2 are rolling, sandy and brushy, but the remaining sections west of this are fair. The last section is hilly.—*E. Bray*, 1883,

- 34. Outlines.**—West, heavy-rolling country, with a good many ponds, and falling rather sharply to the north in the last three miles. Classes first, second and third. East, very hilly country, very broken and stony. Second and fourth class. Some very high ridges are crossed by this line. The southern edge of the Coteau du Missouri is apparently met with at the south of this township.—*F. W. Wilkins*, 1883.

- 35. Outlines.**—West, open, rolling country, broken in places into sandy knolls. Classes second and fourth. A part of Section 6 and the whole of Section 7 are in a saline lake. The east, hilly country, a good deal broken by ponds and marshes, and very stony in places; third class. A small creek, in rather a deep valley, crosses Section 25. Its course is easterly to a lake in the next township eastwards.—*F. W. Wilkins*, 1883.

- 36. Outlines.**—North, the soil is light and grows short grass. Water good and fresh. Timber is reported to exist 6 to 8 miles north, as large as 1 foot in diameter.—*W. A. Ashe*, 1882.

The west is rolling to heavily-rolling prairie, with quite a number of ponds and small marshes in the northern part. Classes 2 and 3. A small lake, lying in a deep, continuous valley, running in a north-westerly and south-easterly direction, occurs in Sections 6 and 7. The east is knolly and hilly, very much broken by ponds and marshes (mostly saline) and very gravelly and stony generally. Third and fourth class. The line on Sections 1 and 12 crosses a high, prominent ridge of very coarse sand and gravel.—*F. W. Wilkins*, 1883.

- 37. Outlines.**—Open prairie. The surface of the eastern part of the township is very broken and hilly, but towards the western part the surface becomes more rolling. Sloughs and grass marshes are numerous. The soil is generally first class, although in some places it is gravelly, with scattered boulders of granite and limestone.—*A. G. Cavana*, 1883.

Open, rolling prairie. Soil, in places, is a sandy loam. Class 2. Several gravel ridges.—*J. S. Dennis, jun.*, 1878.

The soil is light and sandy in the south, and the grass is stunted and short. Any surface water that occurs is good and fresh. Timber is reported to exist in the northern part of the township.—*W. A. Ashe*, 1882.

38. Outlines.—The north-east corner of this township is timbered with poplar 2 to 14 inches in diameter. A lake, about three-quarters of a mile in width by 5 miles in length, enters the township near the north-east corner. Surface is of a very heavy-rolling character. Soil is second class. Cart trail crosses the line in Section 25. Towards the west of the township the country is open and rolling. The soil is all first class.—*A. G. Cavana*, 1883.

39. Outlines.—North, undulating prairie. Bluffs and scrub in places. Soil, sandy loam. Classes 2 and 3. Cart trail to Battleford crosses the line in Section 31. Sections 35 and 36, hilly and rocky.—*L. M. Dechesne*, 1884.

Going north along the western boundary the first three sections of the line passes through heavy timber, which is composed of birch and poplar, from 12 to 18 inches in diameter. After this it is open, rolling prairie, then the latter part of the line is broken and hilly, with very poor land, stony on the ridges and broken by large lakes. Going south on the east boundary, the country is broken by deep ravines, and heavily timbered with poplar. In places there is a little birch. In the bush land there are large lakes. In Section 13 prairie begins. The remainder of this line is broken and hilly, and full of ponds and swamps. The soil is good, but stony in places, being composed chiefly of a sandy loam, with gravel bottom. In the bush is a deep rich black soil, and good water.—*H. D. Ellis*, 1883.

40. Outlines.—North; prairie, very rolling and broken. Soil, sandy loam. The first half going west is mixed prairie and poplar bluffs; the last half is all poplar woods. Some fair sized trees towards the westerly side.—*G. B. Abrey*, 1882.

Going north, along the west boundary, the country is broken and hilly, except the last 2 miles, which is level, poor land, very stony in the ridges and broken by large lakes. The east is covered with poplar bluffs, in which there is some fair sized timber. The country, for the first 3 miles going south, is rolling, with a gradual rise to the south; after that it is broken by deep ravines and heavily timbered with poplar. In places there is a little birch. In the bush there are many large lakes. The soil is a deep, rich black loam. Good water.—*H. D. Ellis*, 1883.

Sub-division.—Is rolling prairie, mostly covered with thick poplar and willows, averaging in size from 2 to 15 inches in diameter; good for fuel and fencing, and a large quantity may be used for building purposes. The soil is a sandy loam, averaging from 4 to 5 inches, with a sandy and gravelly subsoil. Some parts are fit for agricultural purposes, but it is chiefly adapted to stock raising. The south part is well watered by good fresh-water lakes. In general, it is well adapted to settlement. Cart

trail to Battleford crosses in Section 6. Sections 1 and 2 are hilly and rocky.—*L. M. Deschesne*, 1884.

41. *Outlines*.—As it appeared from the southern boundary, this township is very rolling and broken. The soil is a sandy loam, with poplar bluffs on Sections 1, 2 and 3, while Sections 4, 5 and 6 are all poplar woods, with some fair sized trees on Section 6 —*G. B. Abrey*, 1882.

Very much broken by the Eagle Hills in the south and the Saskatchewan River in the north. The hills are not very heavily wooded, except near the west boundary of the range, where some large poplar and balm of Gilead occur in the ravines. The telegraph line and the main trail to Battleford crosses the township. —*H. B. Proudfoot*, 1883.

Sub-division.—Rolling and undulating, and interspersed with poplar and willow bluffs, averaging in size from 2 to 8 inches in diameter, good for fuel and fencing; very little of it is fit for building purposes. Some poplar on the islands in the Saskatchewan River could be used for building, but the quantity is small. Soil, black sandy loam, with sandy subsoil; good for farming and raising of stock. The north part is broken by the North Saskatchewan River, in which are several islands covered with poplar and willow of small dimensions. The water in the ponds and lakes is generally good.—*L. M. Deschesne*, 1884.

42. *Outlines*.—This township is generally rolling and undulating prairie, with a few large grass swamps and ponds. The soil is from 6 to 12 inches deep, and is composed of clay loam on a subsoil of clay. The Saskatchewan River crosses the south-east corner.—*H. B. Proudfoot*, 1883.

Sub-division.—Is generally undulating prairie, especially in the south half, with a black sandy loam, and averaging in depth from 10 to 12 inches; subsoil, sandy. It is good for cultivation and the raising of stock. The northern part is covered with poplar and willow bluffs, averaging in size from 1 to 4 inches in diameter, good for fuel and fencing only. Water is scarce, but can be got a short distance from the surface, as all indications show, by digging.—*L. M. Deschesne*, 1884.

43. *Outlines*.—The soil of this township is generally first class. The surface is rolling prairie, covered with scattered bluffs of poplar; and where there are swamps these are surrounded with willow scrub.—*J. K. McLean*, 1883.

East, rolling prairie. Creek was crossed in Section 13. In Section 25 the line crossed a large alkaline lake, and in 36, the trail to Fort Pitt. Timber in the vicinity of the lake.—*J. K. McLean*, 1883.

Sub-division.—Is generally black sandy loam, with clay subsoil, good for cultivation and the raising of stock. It is undulating prairie in patches, in the centre; the whole remaining part is covered with poplars and willows, averaging in size from 2 to 6 inches in diameter, good for fencing and fuel only. Water is somewhat scarce, though it can be got a short distance from the surface by digging.—*L. M. Deschesne*, 1884.

- 44. Outlines.**—North, hilly and rolling, broken by several good sized lakes. Soil, sandy loam, 10 inches deep, with sand subsoil. Classes 1 and 2. Numerous poplar bluffs. Some of the poplar 6 inches in diameter. A fairly used cart trail crosses the line in Section 32. In Section 31 the land is wet in the spring time.—*W. A. Ashe*, 1883.

This township contains many poplar bluffs; the trees average 6 inches in diameter; some of them are as large as 10 inches. The eastern portion is exceedingly hilly, but in the west the country is rolling and the soil first class for farming. The east is fair, but the soil is not so deep, and will not rate over class 2, except in Sections 1 and 12, and along the south, where the land is rolling and first class. Numbers of ponds or lakelets are scattered about; many of them are fringed with willow, and some are alkaline, particularly towards the east. The Fort Pitt trail crosses the township.—*J. K. McLean*, 1883.

South, undulating prairie. Poplar and willow bluffs. Cart trail was crossed in Section 2.—*L. M. Deschesne*, 1884.

- 45. Outlines.**—Hilly country. The hills are very numerous, having an average height of 50 feet. The soil is good, sandy loam. Surface stones are visible in large quantities on the tops of the hills. The country is generally open prairie, though a few bluffs of poplars are scattered here and there. Water is very abundant in the southern part, and sufficiently so in the rest of the township.—*J. I. Dufresne*, 1884.

Is for the first mile, from the 12th Base Line, undulating prairie, with numerous bluffs of poplar. The remainder forms part of the Thickwood Hills, and is very knolly in some places, with stones on the hill tops and numerous bluffs of poplar amongst the hills. It is broken by numerous ponds and lakes, a good many of them saline or alkaline. The timber is generally suitable only for fuel and fencing. Soil is mostly class 2.—*P. R. A. Belanger*, 1884.

Southwards, the soil is an excellent sandy loam, on a clay subsoil, and will rank classes 1 and 2. Poplar, some of it large enough for building, was growing in limited quantities at the time of survey. Plenty of fresh water may be obtained.—*W. A. Ashe*, 1883.

- 46. Outlines.**—West is hilly in the south half, and rolling or undulating towards the north. The soil rates second or third class, many places being light sand. The south branch of Jack Fish River crosses the south sections, and the north branch Section 30. These two streams have generally a width of 50 to 75 links, and a depth of 1 foot. Good water. However, where crossed by the meridian, they are from 2 to 3 feet deep. The current is very rapid in some places, so that possibly mill sites might easily be found on this river. The township is broken by numerous ponds and lakes. A well-beaten trail, supposed to be the old Fort Pitt and Carlton trail, was crossed in Section 7. Bluffs of poplar appear in the south half, but the country becomes open in the north half.—*P. R. A. Belanger*, 1884.

East, hilly country, the hills averaging 30 feet in height. Very few bluffs of poplars intersect the prairie which forms this township. A cart trail crosses Section 1. The soil consists of a good sandy loam. Surface stones are seen in places.—*J. I. Dufresne*, 1884.

47. *Outlines*.—The country is rolling. The northern part is prairie, and contains bluffs of poplars, together with considerable scrub willows. In the northern part bluffs are a good deal fewer; in fact, it is nearly open prairie near the correction line. The soil is a good sandy loam, though stony in places, more particularly near the west boundary. Grass is plentiful and of good quality. Fresh water is in good supply.—*J. I. Dufresne*, 1884.

48. *Outlines*.—North, rolling and level prairie, well timbered with poplar in bluffs. Soil, sandy loam, stony in places, from 4 to 6 inches in depth. Subsoil sandy; stones and gravel in places. Class 2. A creek, 4 feet wide, crosses the line in Section 34.—*W. A. Ashe*, 1883.

This township is rolling country, of a good sandy loam soil. Some places are stony. The northern half is covered by small poplar and scrub willows, with small openings of prairie. The other half is prairie and bluffs, with scrub willows. A creek with banks about 60 feet high, running in a southerly direction, crosses the eastern part.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XV.

9. *Outlines.*—Is hilly and broken in the south-east quarter, but the rest of the township is apparently all rolling. Several branches of Old Wives' Creek merge into one stream, and leave the township in Section 13, flowing east. These various branches dry to a succession of pools as the summer advances. The soil, generally, is a poor clay, and in many places it is alkaline, with little or no grass. Several trails cross the township.—*A. F. Cotton*, 1883.

In running the southern boundary, Old Wives' Creek was crossed and recrossed several times in Sections 2, 3, 4 and 5, flowing east and north-east. The soil in the basin of the creek is a rich clay, and the pasturage good. The surface in the east is somewhat hilly and broken.—*T. Fawcett*, 1882.

Sub-division.—All open, unwooded and rolling prairie. The soil in the north is a loam, about 6 inches deep, on a subsoil of sandy loam, and class 2. Further south, the soil is rather heavy and will scarcely rate second class. Water is scarce, except in several creeks which cross the township, and these dry up greatly as the warm season advances. Two main trails cross the township—one east and west, and the other north and south. The latter trail is a well-travelled one.—*Dumais and Michaud*, 1883.

10. *Outlines.*—West, gently-rolling prairie, land falling to the north. The soil is a shallow clay loam. East, rolling prairie, with a poor clay soil, no grass, and a good deal of stone.—*A. F. Cotton*, 1883.

Sub-division.—Open, rolling and unwooded prairie; soil, loam with sandy and clay subsoils. Class 2. Well adapted for agriculture. Water is scarce, but may be got by digging.—*Dumais and Michaud*, 1883.

11. *Outlines.*—West, high rolling prairie and very dry. The soil is clay, with little or no grass. Along the east boundary it is hilly prairie, and about midway is a lake in a valley 200 feet below the prairie level. The hills are very steep, and with numerous gullies running into the valley. In a great many of these gullies there is a little scrub maple and poplar. A good deal of sandstone appears in and on the top of the gullies and hills. Some of it is good enough for building. The soil is a poor clay, with a good deal of gravel.—*A. F. Cotton*, 1883.

Sub-division.—Is rolling generally, but in many places is considerably broken by gullies or ravines. There is no wood. The soil is a sandy loam, about 8 inches deep, on sandy and clay subsoils. Class 2 in the southern portion, and class 3 in the north. There is a lake in Sections 36, 25 and 24, the water of which is fresh.—*Dumais and Michaud*, 1883.

- 12. Outlines.**—North, a fine tract of undulating prairie, with a soil of excellent quality, and well adapted to agricultural purposes, but the water is mostly alkaline. The line crosses a small creek, 10 feet wide and 2 feet deep, a tributary to Swift Current Creek.—*W. T. Thompson, 1882.*

Sub-division.—West, rolling, sandy loam soil, clay loam subsoil. Class 2. Very little water. South, rolling prairie. Loam soil, about 3 inches deep, on a sandy loam subsoil. Class 3. East, broken and rolling. Loam soil, 3 inches deep, with sandy loam subsoil. Class 3. A creek crosses the line in Section 36 and flows south across Sections 25 and 24 to a large lake in the south-east. There is a lake of clear fresh water covering Sections 1, 12, 14, 13, 23 and 24, in which there are quantities of whitefish. There is also a muddy lake in Sections 3, 4 and 9.—*Dumais and Michaud, 1883.*

- 13. Outlines.**—West, Swift Current Creek crosses the line in Section 6, and flows in a north-easterly direction through Sections 7 and 18. The land is very stony, with a large amount of gravel. The subsoil along this line is generally clay loam, or clay and gravel. Classes 2 and 3. In the vicinity of Swift Current Creek the banks are stony and very precipitous, with ravines running east and west from the main valley —*J. G. Sing, 1882.*

The ground has many deep ravines, which open into the valley of the Swift Current Creek. Water is very scarce, except near Swift Current Creek, where there are springs of clear water in some of the numerous ravines opening into it. Wood grows in small quantities in three or four ravines. The soil is third class.—*A. C. Talbot, 1882.*

Undulating prairie along the south boundary, the soil being of excellent quality. A small creek, crossing Section 2, is 10 feet wide and 2 feet deep, and a tributary to Swift Current Creek.—*W. T. Thompson, 1882.*

Sub-division.—Rolling and undulating, and unwooded prairie, but has many ravines opening into the valley of Swift Current Creek. Water is very scarce, except in and near the creek, which is fresh. There are springs of clear water in the many ravines opening into the valley of the creek. The soil is generally third class for agriculture, as it is very sandy and gravelly.—*E. Fafard, 1883.*

- 14. Outlines.**—North, rolling prairie. Water is not very plentiful along this line. West, Sections 6, 7, 18 and 19 are broken and hilly, while 30 and 31 are rolling prairie. Several sloughs and marshes. East, rolling prairie. In Section 1 the line crosses Swift Current Creek. Level prairie in the north-east. The ground is less broken than eastwards, but has many deep ravines draining into the valley of Swift Current Creek. Water is very scarce, except in the creek. The soil is third class.—*A. C. Talbot, 1882.*

Sub-division.—Rolling and undulating, except in the north-west, where there are very rough and deep ravines, and a small quantity of wood suitable for fuel. The south half of the township is less rolling, and the soil better, being sandy, but less

gravelly. There are many hay marshes, with good and fresh water. There is also a fresh lake on Sections 14 and 15. Swift Current Creek enters the township by Section 1.—*E. Fafard*, 1883.

- 15** *Outlines*.—The surface of this township is not so broken as in Range 14, but very rolling towards the north. The open ponds of water are invariably bad, while in the ones containing water and grass the water is fresh and good. North, the soil is sandy loam, mixed with gravel. Classes 1 and 2. A large alkaline slough in Section 31. West, sandy; classes 2 and 3. Trail in Section 7. In Section 6 the line crosses Goose Lake, which contains bad water. East, clay and clay loam, in places gravelly. Classes 2 and 3. The Canadian Pacific Railway crosses in a valley which extends over Sections 36, 25 and 24.—*J. G. Sing*, 1882.

South, rolling, prairie. Water scarce.—*A. C. Talbot*, 1882.

Sub-division.—Slightly rolling and undulating, except the south-easterly quarter, where the surface is more broken. The soil is light and poor, and will not rank above classes 3 and 4. There are numbers of bare sand hills on Sections 18, 19 and 31. Goose Lake, which contains alkaline water, enters the township on Section 6. The marshes are large and fresh. The Fort Walsh cart trail crosses the township, as also does the Canadian Pacific Railway. The station of the railway is called Leven.—*E. Fafard*, 1883.

- 16** *Outlines*.—The country becomes more undulating along the north boundary, and is well sprinkled with fresh water marshes. Fully three-fourths of the line is over first class soil.—*T. Fawcett*, 1882.

The surface is very rolling towards the north. The soil is sand and clay loam. The open ponds of water are invariably bad, while in those containing water and grass the water is fresh and good. The west is rolling, with gravel in places. Classes 1 and 2. Section 31 is third class, being covered with conical mounds of gravel. The south is sandy loam, mixed with gravel; subsoil sandy. Classes 1 and 2. In the east it is level and rolling prairie, stony in places. Subsoil, sand and clay and sandy loam. Classes 1 and 2. No water seen along this line.—*J. G. Sing*, 1882.

Sub-division.—Rolling and undulating prairie. Soil, light sandy loam. Class 3. There are, however, many hay marshes, in which the water is good, and one of these—a large one—occurs in Sections 17, 18, 7, 8 and 9.—*E. Fafard*, 1883.

- 17** *Outlines*.—The east and west boundaries are in rolling prairie. The soil is about equally divided between sandy loam and clay loam, with a sandy subsoil.—*H. B. Proudfoot*, 1883.

South, undulating and well dotted with fresh water marshes. Mostly first class soil.—*T. Fawcett*, 1882.

Sub-division.—Surface rolling and, in portions, level prairie. Soil, a clay loam and a sandy loam. Class 1. Good water, well distributed throughout, can be had. No timber. An excellent township for agriculture. The north line crosses lakes in Sections

33 and 35, and another lake lies partly in Sections 20, 21 and 22.—*J. H. Ogilvie*, 1883.

- 18.** *Outlines*.—North, rolling prairie. Soil, heavy clay. Class 1. Water is plentiful in the sloughs.—*L. Bolton*, 1882.

The east and west boundaries were run over hilly prairie, which is very stony in places, having also numerous grass swamps and ponds in the small valleys. The soil is about equally divided between sandy loam and clay loam, with a sandy subsoil.—*H. B. Proudfoot*, 1883.

Sub-division.—Rolling prairie. Soil, sandy loam on clay subsoil. Class 1. There are several lakes containing good water. No timber. A first rate township.—*J. H. Ogilvie*, 1883.

- 19.** *Outlines*.—Mostly gently-rolling prairie, having a heavy clay soil. The northerly part of this township is considerably cut up with ravines running out from the river. Water not very plentiful on the west line, but quite a number of sloughs on the east. No timber on either lines.—*L. Bolton*, 1882.

Sub-division.—This township is generally a rolling prairie, with soils of sandy loam or clay; classes 1 and 2. The central portion of the township is somewhat broken by ravines, in which poplar, oak and ash occurs. The South Saskatchewan River flows through the northern tier of sections, except 31 and 32. A trail was crossed in Section 35. In this section (35) the trail crosses the river. The ferry is about the centre of the south boundary of the north-east quarter of Section 35. At this place the river is about 17 chains wide.—*J. H. Ogilvie*, 1883.

- 20.** *Outlines*.—North, rolling prairie, with occasional marshes of good water, and fair to good soil.—*E. Bray*, 1882.

Is traversed by the south branch of the Saskatchewan River, the banks of which are very much broken by deep gorges or ravines running back on either side, in many places for miles. The valley of the river is something over 300 feet below the level of the table land on either side, and is very crooked. The average width of the valley, from top to top of bank, is over three miles. The average width of the river is about 10 chains, varying very much in depth on account of the sand shoals; the current runs about two miles per hour. The soil is a heavy clay; but in many places very little alluvial soil appears. Very little timber exists along the river; but a few large cottonwoods and some bluffs of poplar in the ravines. Numbers of spring streamlets run down the ravines to the river, making a fine pasturage ground for horses and cattle in the valley where the growth of grasses are luxuriant.—*L. Bolton*, 1882.

Sub-division.—Undulating prairie. Soil, clay loam on clay subsoil, class 1. Excellent farming land. In the vicinity of the Saskatchewan River, in the south-easterly and south-westerly portions of the township, the surface is much broken by deep ravines.—*J. H. Ogilvie*, 1883.

- 21.** *Outlines*.—West, the surface is undulating or rolling. The soil is principally a heavy clay, with indications of alkali, and a thin

growth of grass. Class 2. Some permanent water exists.—*J. F. Garden*, 1882.

East, rolling prairie. Soil, clay and sandy loam. Class 2. Sloughs are numerous. Section 36 is in the sand hills, and a little scrubby. Section 1 is a low alkaline flat.—*T. R. Hewson*, 1882.

The south is all rolling prairie, with a fair sandy loam soil. Surface water is only visible in marshes in Sections 4 and 6.—*E. Bray*, 1882.

Sub-division.—Gently rolling and unwooded prairie. Soil, clay loam, dry and hard. Class 1. Water is very scarce, although fresh.—*J. Stewart*, 1883.

- 22.** *Outlines*.—North-eastward, there is an extensive stretch of low prairie. The soil is a hard clay, and but little permanent water for $4\frac{1}{2}$ miles. In Section 35 the western limit of the high land is entered, gravel and stones being prevalent on the hills and sloughs in the hollows, the classification being second throughout. West, the surface is undulating and rolling. The soil is principally a heavy clay, with indications of alkali, and a growth of stunted grass. Class 2. Some permanent water was found.—*J. F. Garden*, 1882.

East, very hilly country. Soil is a sandy loam, with a sand and gravel subsoil. Class 2. Water in ponds and sloughs.—*T. R. Hewson*, 1882.

Sub-division.—Rolling prairie, except the two eastern tiers of sections, which are broken and hilly. Soil, clay, dry and hard, and water very scarce.—*J. Stewart*, 1883.

- 23.** *Outlines*.—West, a long narrow lake extends southerly through Sections 19, 30 and 31. It is from a quarter to three-quarters of a mile in width, and is enclosed on the east and west sides by wooded banks, rising abruptly to the height of 70 feet; on the northerly part by hills considerably lower, and at the south sloping gently from the lake. Great numbers of ducks, geese and plover were seen at the southern extremity. The land adjoining the lake is high and rolling. Soil is clay or clay loam, second class. South of the lake the lower prairie is entered, the surface being undulating, with hard-baked clay soil. East, undulating prairie, extending southward for $3\frac{1}{2}$ miles, where the country becomes high and rolling. The soil varies from a clay loam, in the higher land, to a strong heavy clay, with a scanty growth of grass, and but little sod in the lower level, where there are also indications of alkali. Permanent water, and some stone and gravel, exist in the higher land. In Section 6 there is an extensive stretch of low prairie. The soil is a hard clay, and there is but little permanent water for the next four sections. In Section 2, the western limit of the high land is reached, gravel and stones being prevalent on the hills and sloughs throughout the hollows. Class 2.—*J. F. Garden*, 1882.

Sub-division.—Rolling and open prairie. The soil is a clay loam, about 10 inches deep, on a clay subsoil, and ought to rate class 1. It is, however, heavy, dry and hard, while water, gen-

erally, is scarce, except in White Bear Lake and the creek flowing into it, which is alkaline. This lake crosses the north-west of the township, submerging portions of Sections 19, 30, 31 and 32.—*J. Stewart*, 1883.

21. *Outlines*.—The east end of the north boundary is in high hills, about 150 feet above the level of valley, and are considerably broken by ponds and swamps, and extending in a north-easterly direction. The soil in these hills is first and second class. Westward the surface becomes stony in the vicinity of a lake of considerable size, which extends to the western boundary.—*T. Kains*, 1882.

West, a long, narrow lake runs southward on this line. It is bounded on the east and west sides by eroded banks, rising abruptly, nearly, from the water's edge to the height of 70 feet. The lake has a width of from half to one and a-half miles. Great numbers of ducks, geese and plover. The land adjoining the lake is high and rolling, soil being either clay or clay loam, and second class. East, the north half is high, rolling and open. The south half is a lower undulating prairie. The clay varies from a clay loam, in the higher land, to a strong heavy clay, with a scanty growth of grass and but little sod in the lower level, where there are indications of alkali. Some stone and gravel exists in the higher land.—*J. F. Garden*, 1882.

Sub-division.—Generally rolling prairie; soil, clay. The hills on the north-east corner are sandy loam, and stony. There are a few ponds of good water among the hills. The water of White Bear Lake is unfit for use.—*J. Stewart*, 1883.

25. *Outlines*.—The south-east half is occupied by a large hill, measuring about 150 feet above the level of the prairie, where there is excellent water in hay marshes and ponds. There is a luxuriant growth of grass over the hill, from which also many ravines and gullies are running northwards, in which there occurs some scrub and small poplar timber. In Range 14 the timber appears to be in greater quantity. The south-west corner of this township is partly occupied by a large alkaline lake, running south. A valley of about 30 feet deep and three-quarters of a mile wide runs from the north-east end of the lake, in a north-easterly direction. A bed of a small creek furrows this valley. The north-west half of this township is rolling prairie. The soil ranks 1st, 2nd and 3rd class, and is well adapted for all purposes. The west is rolling prairie. Soil, clay and clay loam; class 1. Hay marshes are numerous; good water.—*P. R. A. Belanger*, 1883.

South, hilly and rolling, with numerous grass swamps. Soil, sand and clay loam, about 3 inches deep, resting on a clay subsoil. Classes 1 and 2. The lake crossed in Section 6 is alkaline, has a green tint and offensive smell.—*T. Kains*, 1882.

Sub-division.—Hilly, rolling, stony and unwooded. Soil, some heavy clay, but the greater part sandy loam on sandy subsoil. class 2. Good farming land in the valleys, but on hills only good for grazing. A fresh water lake occurs on Sections 5, 6, 7, and 8.—*J. Bourgeois*, 1833.

- 26. Outlines.**—West, undulating prairie. Soil, clay, 18 inches deep, with clay subsoil. Class 1. A creek, or chain of small water pools, crosses the line in Section 30. Several hay marshes were seen, but at the time of survey (July) most of them were dry. The east is level, with same soil. Class 1. A hay marsh was seen a short distance west of the line in Section 24. Water scarce.—*P. R. A. Belanger*, 1883.

Sub-division.—Rolling and undulating prairie. Soil, light and heavy clay, on all-clay subsoil. Rather poor for agricultural purposes, but the low lying places are good grazing lands. Water is scarce throughout, and there is no wood.—*J. Bourgeois*, 1883.

- 27. Outlines.**—In the west the soil is clay and clay loam, 12 to 18 inches deep. Class 1. A creek, or chain of small pools, flows north, through Sections 30 and 31, winding across the line several times. Low bottom lands, wet in spring, were crossed. In general, the surface is that of a very dry, undulating prairie. A large hay marsh occupies part of Sections 23, 24, 25 and 26. It runs north-easterly for about three miles in Range 14, and furnishes abundance of hay and good water.—*P. R. A. Belanger*, 1883.

- 28. Outlines.**—Hilly prairie northwards. Soil, a clay loam of 8 to 20 inches deep, on clay subsoil. Class 2. A large marshy lake lies on Section 36, and marshes abound in all the valleys. Large marshy lakes lie in the north-west.—*T. Fawcett*, 1883.

Is partly undulating and partly rolling prairie, of first class clay soil, watered by many small lakes, from one to three miles long, and a creek running into one of them. There is also a spring of fresh water on the west boundary of Section 6. One of these lakes is crossed by the west boundary of Section 18, is about $2\frac{1}{2}$ miles long by $\frac{1}{2}$ to $\frac{3}{4}$ of a mile broad, and appears to be from 6 to 10 feet deep. Its water is very bad, and large flocks of ducks and geese frequent it. The largest of these lakes occupies the centre of the township, and appears to be 3 miles long by 1 mile broad, and is very shallow. A large hay marsh occupies the south half of Section 36 and the north half of Section 25. A large quantity of good hay may be cut on this marsh.—*P. R. A. Belanger*, 1883.

- 29. Outlines.**—Is hilly prairie to the south-west and rolling and level to the north-west. The hills are well supplied with water.—*J. A. Maddock*, 1883.

In the west the soil is a sandy loam, about 6 inches deep, with sand subsoil. Class 3. In the east the soil is a clay loam, 6 inches in depth, resting on clay subsoil. Class 2.—*J. A. Maddock*, 1883.

The south sections are undulating, with a good clay loam on a clay subsoil. Water fresh and abundant in the ponds and marshes. Grasses luxuriant.—*T. Fawcett*, 1883.

- 30. Outlines.**—Rolling and broken to the south and level to the north. The water of Eagle Creek is unfit for drinking, but there are several excellent fresh water springs in the banks of the valley. Soil, a good clay loam to the east, 6 inches deep, with clay sub-

soil. Class 2. To the west, the soil is sandy loam, 6 inches deep, with sand subsoil. Class 2. Section 18 is level, with a ravine 60 feet deep. Sections 19, 30 and 31 are also level, but with soil of sandy loam and clay, subsoil sand and clay. Class 2.—*J. A. Maddock*, 1883.

- 31. Outlines.**—The east boundary is an open, rolling prairie, with some good sized, shallow fresh-water marshes scattered along it. First and second class, generally. The south of Section 1 is very stony; it is in the valley of Eagle Creek, and is fourth class. A small watercourse crosses Section 36. The west, along Sections 6, 7 and 18, are gently-undulating, open prairie, with a dark, heavy clay soil. First class. The balance of this line lies over open, rolling prairie, with a clay loam soil, also first class. The "Coteau du Missouri" borders the southern side of Section 19. A small creek, course easterly, crosses Section 31.—*F. W. Wilkins*, 1883.

- 32. Outlines.**—The north is rather hilly prairie, but has a good soil and abundant pasturage.—*E. Bray*, 1883.

This township consists of rolling to heavily-rolling country. The soil is generally a clay loam, and first-class, and a few small fresh-water marshes are scattered about. The east is quite open, and rises to the north. Sections 1 and 36 are second class, and 12 and 13 are springy and alkaline land; 24 and 25 are first class, with a clay loam soil. At the south side of Section 24 the country rises more sharply to the north, and at the 9th Base a considerable elevation is reached above the plain to the south and the east.—*F. W. Wilkins*, 1883.

- 33. Outlines**—West, heavily-rolling to hilly prairie, with a good many ponds and small marshes, and some very stony places. Mostly class 2. East, heavy-rolling to hilly country, a great deal broken by ponds and marshes, and very stony in places. Mostly class 3. A small creek, in a deep valley, courses easterly over Section 1.—*F. W. Wilkins*, 1883.

South, hilly; good soil, and pasturage excellent.—*E. Bray*, 18-3.

- 34. Outlines.**—West, open, rolling prairie, with sand loam soil, getting lighter to the south. Sections 6, 7 and 18 are class 2. Sections 19, 30 and 31 are class 4. East, heavy-rolling country, with a good many ponds, and falling rather sharply to the north in the last three miles. Classes 1, 2 and 3.—*F. W. Wilkins*, 1883.

- 35. Outlines.**—West, rolling country, occasionally broken into sandy knolls, and classes 3 and 4, with the exception of Section 31, which is class 1. Sections 6, 7, and part of 18, are pretty well covered with timber (poplar, principally), some of which is of sufficient size for building purposes. This wooded tract extends for about six miles east and west, is two miles wide, and contains a large amount of fuel. East, open, rolling country, broken in places into sandy knolls. Classes 2 and 4. A part of Section 1, and the whole of Section 12, are in a saline lake.—*F. W. Wilkins*, 1883.

- 36. Outlines.**—On the northern sections the soil is light, supporting a short grass. Surface water is good and fresh.—*W. A. Ashe*, 1882.
West, open, rolling prairie, with clay loam soil. Classes 1 and 2. East, rolling to heavily rolling prairie, with quite a number of ponds and small marshes in the northern part. Classes 2 and 3. A small lake, lying in a deep, continuous valley, running in a north-westerly and south-easterly direction, exists in Sections 1 and 12.—*F. W. Wilkins*, 1883.

The south line was run over a rolling surface, with a light soil, on which the grass was rather stunted.—*W. A. Ashe*, 1882.

- 37. Outlines.**—Through the centre of this township, east and west, it is open, rolling prairie. Soil, sandy loam, with ridges of gravel. Class 2.—*J. S. Dennis, jun.*, 1878.

Open, rolling prairie. Water scarce and sloughs dried up, but grass marshes are numerous. Granite and limestone boulders on the ridges. Soil, clay loam, 5 and 6 inches in depth; subsoil, clay. Class 1. The cart trail from Swift Current to Battleford was crossed in Sections 18 and 30.—*A. G. Cavana*, 1883.

- 38. Outlines.**—The surface is of a very heavy-rolling character, becoming more level towards the north-west part of the township. Fresh water is in abundance. No timber. Granite and limestone boulders are thickly inlaid in places. The soil is usually first class.—*A. G. Cavana*, 1883.

- 39. Outlines.**—The northerly portion of the west boundary is broken and stony; the southerly is more level, but very stony and poor land. Going north, on the east boundary, the line commences in heavy timber, composed of birch and poplar, the trees growing from 1 foot to 18 inches in diameter, and continues so for about three miles, when open prairie is met with. This latter part of the line is broken and hilly, poor land, very stony in the ridges, and broken by large lakes.—*H. D. Ellis*, 1883.

- 40. Outlines.**—Hilly and broken along the north boundary. Birch and poplar woods are heavy across the first four sections. Bluffs of timber appear over the remainder. The timber is generally of good size. The soil is a sandy loam, and is good.—*G. B. Abrey*, 1882.

West, very hilly, and broken by lakes and ponds; very poor, stony land. East, going north, open prairie is met with. The country is broken and hilly, except the last two miles, which is very level, poor land, very stony in the ridges, and broken by large lakes.—*H. D. Ellis*, 1883.

The surface of the northern part of the township is undulating, and timbered with poplar, from 6 to 14 inches in diameter. The southern part is hilly, with numerous fresh-water sloughs. The soil is second class.—*A. G. Cavana*, 1883.

NOTE.—All of this township, with the exception of the southerly and easterly tiers of sections, is in the Red Pheasant Indian Reserve.

- 41. Outlines.**—The west line, after crossing a small piece of prairie, enters heavy timber, composed, principally, of poplar, birch and underbrush. There are few swamps. The land is, at the south,

rolling, but towards the north becomes hilly, and the timber very heavy.—*H. D. Ellis*, 1883.

The east is entirely occupied by the Eagle Hills, which are timbered heavily with poplar, varying from 6 to 12 inches in diameter on the high land, and from 10 to 15 inches in thickness in the ravines—*H. B. Proudfoot*, 1883.

Southwards, hilly and broken. In the birch and poplar woods throughout the easterly four miles, trees up to 18 inches in diameter were seen. Soil is a sandy loam, of good quality.—*G. B. Abrey*, 1882.

Sub-division.—Is entirely occupied by the Eagle Hills, which are heavily timbered with poplar and birch, varying from 6 to 25 inches in diameter. The land is very much broken by ridges, gullies, marshes and lakes. The soil is a good black sandy loam, averaging 10 inches deep on a clay subsoil. On the south-west corner is the Red Pheasant Indian Reserve, occupying Sections 3, 4, 5, 6, 7, 8, 9, and portions of 2, 10 and 11. All the marshes, ponds and lakes contain fresh water. The Saskatchewan River passes the north-east corner of Section 36, as well as the telegraph line and the Battleford and Prince Albert trail.—*Dumais and Michaud*, 1884.

42. *Outlines.*—West, chiefly prairie and bluffs. The land is hilly, and much broken by gullies and swamps.—*H. D. Ellis*, 1883.

Is cut diagonally from the south-east to the north-west, by the north branch of the Saskatchewan River. On the south side of the river the land is much broken by the Eagle Hills, the timber on which becomes much smaller as the river is approached. On the north side of the river the country is rolling prairie, with a few clumps of small willows, &c. Soil, sandy loam; subsoil, clay.—*H. B. Proudfoot*, 1883.

Sub-division.—The Saskatchewan River runs across this township in a south-easterly direction, entering at Section 31 and leaving at Section 1. The trail to Battleford and the telegraph line follow the bank of the river. The central southern sections are hilly and heavily wooded, and there are clumps of timber to the east. The surface which is south of the river is more broken and hilly than the north side. The country north of the river is all gently-rolling prairie. Poplar and willow occurs in occasional bluffs, and there are plenty of ponds and marshes. The soil is composed of a good clay loam on a clay subsoil and classes 1 and 2. There is a gradual slope from the north-east to the river.—*Dumais and Michaud*, 1884.

43. *Outlines.*—This township is all first class agricultural land. The south-west corner is somewhat broken by the Saskatchewan River. There are poplar bluffs in the north-east, and willow in the swamps. In the west there are several ponds or lakelets, and also a cart trail. The south-west corner on the the river is heavily wooded, both on the banks and on the islands.—*J. K. McLean*, 1883.

Sub-division.—The greater part of this township, north of the Saskatchewan River, is gently-rolling prairie, with a slight slope

southwards. There are some poplar and willow bluffs in the north-east, only good for fuel and fences. In the north-west corner of Section 6 and on the islands in the river there are poplars and birch from 6 to 20 inches in diameter, and suitable for the construction of buildings. The soil is composed of a good clay loam and clay subsoil, of classes 1 and 2.—*Dumais and Michaud*, 1884.

44. *Outlines*.—North, slightly rolling, with thick bluffs of poplar, from 6 to 12 inches in diameter. Soil is a sandy loam, about 12 inches in depth, resting on a sandy subsoil. Class 1. A few sloughs.—*W. A. Ashe*, 1883.

The township has poplar and scrub, alternating with prairie. Alluvial soil, from 8 to 12 inches deep, with clay and sand subsoil. Class 1. Poplars, 8 inches in diameter, were seen. The Fort Pitt trail crosses the central portion. A large grass pond, containing fresh water 1 foot deep, covers the south half of Section 19. A few grass ponds, containing fresh water, scattered about. First class agricultural land.—*J. K. McLean*, 1883.

Sub-division.—Gently rolling prairie, about two-thirds covered with poplar and willow bluffs. The soil is generally a dark sandy loam on a clay subsoil, and classes 1 and 2. The size of the poplar trees is from 3 to 20 inches in diameter, good for fencing and fuel. Some settlers in the south-west quarter.—*Dumais and Michaud*, 1884.

45. *Outlines*.—Open prairie, alternating with poplar, averaging 6 inches in diameter. Soil, clay and sand loam, from 8 to 12 inches deep, on a clay subsoil. Class 1. No water on this line.—*J. K. McLean*, 1883.

is, for the first mile, from 12th Base Line, undulating prairie with numerous bluffs of poplar. The remainder forms part of the Thickwood Hills, and is very knolly in some places, with stones on hilltops, and numerous bluffs of poplar amongst the hills. It is broken by numerous ponds and lakes; a great many of them are saline or alkaline. The timber is generally suitable only for fuel or fencing. The soil is mostly class 2.—*P. R. A. Belanger*, 1884.

The southern sections contain a soil generally of a high average, an excellent sandy loam, with clay subsoil, and growing sufficient poplar for building, fencing and fuel purposes.—*W. A. Ashe*, 1883.

46. *Outlines*.—West, on Section 7 lies a large lake extending to Section 9, and also occupying part of Sections 16, 17 and 18. A creek, 1 chain wide runs its water to this lake. This creek is met in Section 19, and comes in an easterly direction. This township is nearly all open prairie; a few bluffs of poplars and scrub willows are occasionally met with. The morass spoken of in Township 46, Range 16, lies in Sections 30 and 29, and perhaps further east. This township is hilly country with good sandy loam soil.—*J. I. Dufresne*, 1884.

East is hilly in the south half, and rolling or undulating toward the Correction Line. The soil rates 2nd and 3rd class, many places being light sand. The south branch of Jack Fish River crosses Section 1 and the north branch twists across Section 25.

These two streams have generally a width of 50 to 75 links and a depth of 1 foot, with good water. However, where crossed by the meridian they are from 2 to 3 feet deep. The current is very rapid in some places, so that possibly mill-sites may be found on this river. The township is broken by numerous ponds and lakes, and there is a large spring on Section 13. A well beaten trail, supposed to be the old Fort Pitt and Carlton trail was crossed in Section 12. Bluffs of poplar appear in the south half, but the country becomes open in the north half.—*P. R. A. Belanger*, 1884.

47. *Outlines*.—Rolling prairie, of a good sandy loam soil, but stony in places. The same creek as in Township 48, Range 15, runs through the western sections of this township. Water in sufficient quantity is found in lakes and ponds, which, with few exceptions, are surrounded by a belt of willows. The country is nearly open, being intersected by occasional bluffs of poplar. Bluffs are much more numerous in the northern part.—*J. I. Dufresne*, 1884.

48. *Outlines*.—North, rolling prairie, dotted with poplar bluffs; timber averages 6 inches in diameter. Soil, sandy and clay loam, 3 to 10 inches in depth. Subsoil, sand and clay; in places gravel and stones. Classes 1 and 2. A couple of ponds, and in Section 33 Lost Horse Creek were crossed. Some small mill sites can be found on this creek, which is 18 inches deep, and runs at the rate of 3 to 5 miles an hour. The bottom is good.—*W. A. Ashe*, 1883.

Rolling prairie, of a good sandy loam soil. Some places are not so fit for agricultural purposes, being stony, but less so than in the preceding range. The creek spoken of in Township 47, Range 16, runs in a southerly direction through the western half of this township. This creek is almost the only water seen. The northern half is covered by poplar, of small size, averaging from 2 to 3 inches in diameter, with small openings of prairie. The other half is prairie and bluffs of poplar, with scrub willows.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XVI.

9. *Outlines*.—Rolling prairie, with numerous sloughs. The soil is a good but shallow clay loam, and a little alkaline appears in some places. A branch of Old Wives' Creek runs east through the south of this township, and another branch was crossed in Section 24. At the time of the survey it was almost dry, and alkali cropped out in a good many places. Eastwards, the soil is an alkaline clay, with little or no grass.—*A. F. Cotton*, 1883.

South, several ravines. A branch of Old Wives' Creek is crossed in Sections 6 and 2. In the last section the creek is only a succession of pools, flanked by high, steep clay banks. Granite boulders are of frequent occurrence throughout the township.—*T. Fawcett*, 1882.

Sub-division.—Rolling, undulating and unwooded prairie. Soil, sandy loam on clay subsoil. Three small creeks cross the township as feeders to Old Wives' Creek. There are several marshes of good clear water. Two trails cross the township east and west. Is a good agricultural township.—*Dumais and Michaud*, 1883.

10. *Outlines*.—Rolling and undulating prairie. In Sections 7 and 18, and eastwards, the surface rises into hills of about 100 feet high, forming a watershed between Swift Current and Old Wives' Creeks. A plateau reaches north of this about three miles, and then a gradual descent takes place. This inclination of the surface is across the whole of the township. The soil is a good but shallow loam. There are a few sloughs, but water, generally, is scarce.—*A. F. Cotton*, 1883.

Sub-division.—The surface is rolling and undulating, with a sandy loam soil on a clay subsoil, and varies in quality from class 1 to class 3. In the north it is rather better than elsewhere. There is a lake of good clear water on Section 33, and water may be obtained in many other parts of the township. A couple of creeks cross the southern boundary. One of these flows from a marsh in Section 6, and contains good water, but has a very slow current.—*Dumais and Michaud*, 1883.

11. *Outlines*.—West, Sections 30 and 31 are high, rolling prairie; after that it becomes gently-rolling. The soil is a clay loam and gravel. A fair sized slough was seen in the south-west corner, covering the centre of Section 6. East, high rolling prairie, and very dry. The soil is clay, with little or no grass.—*A. F. Cotton*, 1883.

Sub-division.—To the north it is broken; southwards it is undulating. Soil, sandy loam on clay loam subsoil. Swift Current Creek runs through the township, on Sections 32 and 33, and there are a few small bluffs of poplar on its southern bank. The

township is a good one for pasture and, in some places, for farming purposes. In Section 3 there is a lake, which extends into the township southwards, the water of which is very good and clear. The centre of Section 6 is wet and marshy.—*Dumais and Michaud*, 1883.

- 12. Outlines.**—North, much broken by hills, ridges and ravines. Soil generally clay. Large number of granitic and other boulders, chiefly on the tops of ridges. Water in ponds, &c., mostly alkaline. Swift Current Creek is 20 feet wide, 2 feet deep, and crosses the line in Section 36.—*W. T. Thompson*, 1882.

Sub-division.—The surface generally consists of rolling prairie, except in the vicinity of Swift Current Creek. The valley of this creek is very much broken, and is entered by numerous ravines, coulées and cross gullies. The creek makes a very circuitous and crooked diagonal course north-easterly across the township, from Section 6 to Section 36. The current is slow and the water is good. In the bottom of the valley, which is stony and sandy, small poplar, cherry and willows are to be found. The soil is a sandy loam on both sand and clay subsoils, and is classes 2 and 3. The surface is stony and gravelly on the knolls and on the banks of the gullies. A few fresh water marshes occur.—*Dumais and Michaud*.

- 13. Outlines.**—The soil is good, as a general thing, and is a clay loam. The surface is very rolling, but is all tillable land, except the south-easterly part, in the vicinity of Swift Current Creek, the banks of which are stony and very precipitous, with ravines running east and west from the main valley. The water in the creek is fresh and good. In the banks are springs of water.—*J. G. Sing*, 1882.

The west and south is much broken by hills, ridges and ravines, with large numbers of granitic and other boulders, chiefly on the tops of ridges. Swift Current Creek crosses the south-east corner, at which point it is 20 feet wide, 2 feet deep.—*W. T. Thompson*, 1882.

Sub-division.—Rolling prairie, except to the south-east, where it is much broken by Swift Current Creek Valley, under similar surface features as in Township 12. There are many hay marches in the township, where the hay is good and rich. Soil, a good sandy loam, gravelly in many places. Classes 2 and 3 for agricultural purposes. No wood.—*E. Fafard*, 1883.

- 14. Outlines.**—North, rolling prairie. The cart trail from Fort Walsh to Qu'Appelle was crossed in Section 33; and in Sections 33, 34 and 35 the Goose Lakes are situated. Going southwards it is more broken, particularly in the south-east, where there are sand hills and small marshes in large numbers. The soil is third class.—*A. C. Talbot*, 1882.

West, much broken by hills, ridges and ravines. Soil is generally clay. Large numbers of granite and other boulders, chiefly on the tops of ridges. Much of the water is alkaline.—*W. T. Thompson*, 1882.

On the south line, from Sections 1 to 4, the country is somewhat hilly and broken with numerous marshy spots and ponds. Sections 5 and 6 are rolling prairie. The soil is all tillable.—*J. G. Sing*, 1882.

Sub-division.—The south two-thirds of the easterly half of the township is broken by numerous deep ravines, and possesses a sandy and gravelly soil of a poor class. East, West and Centre Goose Lakes occupy the northern centre of the township, and contain water, which is slightly alkaline, but drinkable. The Canadian Pacific Railway crosses the township immediately south of Goose Lake, and has a station named after the lake. There are many hay marshes in the southern part of the township, in which the water is fresh. To the north, the soil being somewhat alkaline, the hay is very poor. The Fort Walsh and Qu'Appelle trail crosses the north-west.—*E. Fafard*, 1883.

- 15** *Outlines.*—North, rolling. Soil, clay and clay loam. Classes 1 and 2. An alkali lake in Sections 31 and 32. East, sandy. Classes 2 and 3. Qu'Appelle trail in Section 12. In Section 1, Goose Lake; bad water. Generally the surface is very rolling. Soil, a light sandy or clay loam. Surface water, alkaline or stagnant. Near the centre are bare sand hills. The water there is bad, except the springs found in banks south of Goose Lake, which are excellent.—*J. G. Sing*, 1882.

Southward, on the west boundary, the surface is undulating, and the soil of good quality. In Section 19 there is an alkaline lake, and for the remainder of the distance the surface is composed of drifting sand hills, almost devoid of vegetation.—*T. Fawcett*, 1882.

South, rolling prairie. In Section 1 is Goose Lake, and in 3 the cart trail from Fort Walsh to Qu'Appelle.—*A. C. Talbot*, 1883.

Sub-division.—The south half of the township is blown sand-hills. The north is undulating and rolling prairie, with a poor sandy loam soil. There are many small lakes and ponds of alkaline water. There are many fresh-water marshes in the north-west. The township is a poor one.—*E. Fafard*, 1883.

- 16.** *Outlines.*—North, undulating, and well sprinkled with fresh-water marshes. Some of the hill sides expose numerous large granite boulders. In Section 31 the surface slopes south to a salt, alkaline lake, the soil becomes sandy, and clumps of black cherry frequently occur. South of this again there is another alkaline lake in Section 19. The soil within half a mile of this lake is encrusted and thoroughly saturated with salts. Southwards of this the soil is of a better quality and the surface is undulating.—*T. Fawcett*, 1882.

Surface very rolling, with a light sandy loam or clay soil, and alkaline surface water. The open ponds of water are invariably bad, while the ones containing water and grass are fresh and good. East is rolling, with gravel in places. Classes 1 and 2. Section 36 is third class, being covered with conical mounds of gravel.—*J. G. Sing*, 1882.

Sub-division.—Very similar in surface, features and soil to Township No. 15.—*E. Fafard*, 1883.

- 17. Outlines.**—Going northward, on the west boundary, the soil varies from sand to a rich clay loam. In Section 18 is a very alkaline flat, which drains to a large lake east of the line, occupying Section 20 and parts of several sections surrounding it. The surface becomes very hilly in Section 19. Several fresh water springs exist in the coulees intersecting the line; tops of hills stony. South, undulating, and containing a fair supply of fresh water marshes. Large granitic boulders appear firmly imbedded in the soil of some of the hills. In Section 6 the surface slopes south, the soil becomes sandy, and clumps of black cherry frequently occur.—*T. Fawcett*, 1882.

East, rolling prairie. The soil is about equally divided between sandy loam and clay loam, with a sandy subsoil.—*H. B. Proudfoot*, 1883.

Sub-division.—Rolling prairie. Soil, deep sandy loam, of good quality, nearly class 1, and well suited for agricultural purposes. A large lake occupies large portions of Sections 19, 20, 29 and 30, which has fresh water. No wood.—*J. H. Ogilvie*, 1883.

- 18. Outlines.**—North, level prairie. Soil is heavy clay. Class 1. A large slough in Section 33. Several ravines west of this, with small creeks.—*L. Bolton*, 1882.

Going northward, on the west boundary, the surface becomes somewhat broken. Fresh-water marshes are of frequent occurrence, and the soil is generally a clay loam, with heavy clay subsoil.—*T. Fawcett*, 1882.

East, hilly prairie, very stony in places, having also numerous grass swamps and ponds in the small valleys. The soil is about equally divided between sandy loam and clay loam, with a sandy subsoil.—*H. B. Proudfoot*, 1883.

Sub-division.—Rolling prairie, fairly suited for agricultural purposes. Soil, generally, sandy or clay loam, 8 inches deep; much of it class 1. No wood. The Qu'Appelle trail crosses east and west.—*J. H. Ogilvie*, 1883.

- 19. Outlines.**—Mostly gently-rolling prairie; heavy clay soil. The northerly part is considerably cut up with ravines running out from the River Saskatchewan. Water not very plentiful, and no timber.—*L. Bolton*, 1882.

Sub-division.—Undulating prairie. The eastern and central parts are a sandy loam, of good quality; but the western and north-western portions are a hard clay. The Saskatchewan River enters Section 31, north-west corner.—*J. H. Ogilvie*, 1883.

- 20. Outlines.**—North, rolling prairie, with occasional marshes of good water, and fair to good soil. The Saskatchewan River, with deep-cut ravines and banks, crosses the north-west corner. Going southwards from the river, on the western boundary, the land in the vicinity of the river is broken by hills, the sides of which contain some brush, and are rough and poor, but farther south the land is of fair quality. Soil, 3 to 5 inches deep, and classes 2 and 3. A large marsh or pond extends over the north half of Section 6.—*E. Bray*, 1882.

The two southerly tiers of sections are traversed by the Saskatchewan River and its valley, which is about 300 feet below the table land on either side. The current of the river is a two mile one. There is very little timber in the valley. Vegetation is luxuriant in the valley, but short and stunted on the banks. There are many springs in the ravines, which makes the valley a very desirable place for pasturage. The soil is a heavy clay, with, in many places only a very slight coating of alluvial soil.—*L. Bolton*, 1882.

Sub-division.—Undulating prairie, very much broken up by ravines along the Saskatchewan River, which courses on the intersection of the two southerly tiers of sections. Soil, generally clay loam. Class 1.—*J. H. Ogilvie*, 1883.

- 21.** *Outlines*—South and west, rolling prairie, with occasional marshes of good water, and fair to good soil.—*E. Bray*, 1882.

East, the surface is undulating or rolling. The soil is principally a heavy clay, with indications of alkali, and a thin growth of grass. Class 2. Some permanent water was found.—*J. F. Garden*, 1882.

Sub-division.—Rolling prairie. Soil, clay loam, about 10 inches in depth, with clay subsoil. Class 1. Swift Current and Battleford trail crosses from Section 1 to Section 35. This is a good township, although water is somewhat scarce.—*J. Stewart*, 1883.

- 22.** *Outlines.*—Going west, on the north boundary, the line passes over a low prairie level for five miles. In Section 31 the land ascends to a high and rolling country, which extends a considerable distance to the north-east and south-west. A coulée in Section 31, running north into the continuation of White Bear Lake, contains some poplar and cherry bush, the only wood in this township. East, surface undulating or rolling. Soil, principally a heavy clay, with indications of alkali and a thin growth of grass. Class 2. Water scarce.—*J. F. Garden*, 1882.

West, rolling prairie, with occasional marshes of good water, and fair to good soil. Near the north line some ravines occur which appear to have their outlet to the north-east.—*E. Bray*, 1882.

Sub-division.—Rolling prairie. Soil, clay loam, about 10 inches in depth, with a clay subsoil. Class 1. Swift Current and Battleford trail crosses Section 2 to Section 34. A large marsh occurs on Sections 1, 2, 11 and 12, in which there is good water.—*J. Stewart*, 1883.

- 23.** *Outlines.*—West, level prairie, of a first-class clay soil, which extends, without intermission, to the north side of a ravine 100 feet deep, and half a mile wide, near the south boundary. This ravine contained no water and the banks were stony.—*T. Kains*, 1882.

Section 36 descends into the valley of a long, narrow lake, which extends north and south in the range adjoining eastwards, and the southern end of which enters this township in Sections 24 and 25. The valley of the south shore of this lake rises more abruptly in Section 13, after which the land is rolling. The south-

ern end of the lake is shallow and marshy, and great numbers of geese, ducks and plover were seen feeding along the line. A continuation of the valley extends to the south and south-west. The land in the valley and adjoining the lake is rolling, with a soil of clay or clay loam, and class 2. South of the lake the lower prairie is entered, and the surface becomes undulating, and the soil hard and baked, low prairie, level for five sections. In Section 6 the land becomes high and rolling. A coulée, in Section 6, runs north towards White Bear Lake, and contains a little poplar and cherry bush.—*J. F. Garden*, 1882.

Sub-division.—Rolling, hilly and stony by turns. Soil, sandy and clay loam, 10 inches deep, resting on a clay and gravel sub-soil. Portions are 1st class; remainder are 2nd and 3rd. The Swift Current and Battleford cart trail crosses north and south across the township. There is a large lake near the eastern boundary, which breaks upon Sections 13, 24 and 25; but west of this there are only a few small scattered ponds.—*J. Stewart*, 1883.

- 24. Outlines.**—The surface is level prairie, and has a first class soil along the easterly two-thirds of the northern boundary, after which some high hills occur. The western boundary is rough and high rolling, with hills, some of which are 150 to 200 feet above the adjoining prairie. The easterly half of this township is decidedly the best.—*T. Kains*, 1882.

A long, narrow lake runs south and northwards, just east of the eastern boundary, and touches this township in Section 36. The land in the neighborhood of the lake is high and rolling, with a soil either of clay or clay loam, and is about second class.—*J. F. Garden*, 1882.

Sub-division.—East half, rolling prairie, with a heavy clay loam soil; west half, broken and hilly with a light sandy loam soil. There are a good many ponds of good water among the hills. There is no water on the east half, except a small alkaline lake on Sections 25 and 26. Swift Current and Battleford trail crosses the township.—*J. Stewart*, 1883.

- 25. Outlines.**—Soil, clay loam, about 18 inches in depth. Classes 1 and 2. Ponds and marshes, containing good fresh water. On the hills the soil is sandy and stony. Trail to Battleford in Section 30. Township 25 is mostly hilly, with the exception of the eastern sections, which are undulating or rolling prairie. For agricultural purposes the soil is 1st and 2nd class. It is well watered by small ponds and hay marshes. Section 1 is broken by the lake banks and ravines.—*P. R. A. Belanger*, 1883.

The lake crosses the south-east corner. From here to Section 4 the country is a fine prairie, with a first class soil. Sections 4, 5 and 6 are very hilly, with numerous ponds on the hills.—*T. Kains*.

Sub-division.—Rolling, hilly, stony and unwooded. Soil, light clay loam and all-clay subsoil. Class 2. There are some parts good for farming, but most is only fit for grazing. In the few ponds which exist the water is good.—*J. Bourgeois*, 1883.

- 26. Outlines.**—Is generally rolling, undulating prairie. Sections 2, 3, part of 4, 30, 31 and 32, are somewhat hilly. It is well watered by numerous hay marshes. Soil, clay, 18 inches deep, with a clay subsoil. Class 1. A creek, or chain of small water pools, crosses the line in Section 25.—*P. R. A. Belanger*, 1883.

Sub-division.—Rolling. Soil, light clay and all-clay subsoil; generally poor farming land. Water scarce. No wood.—*J. Bourgeois*, 1883.

- 27. Outlines.**—This township is either level or rolling in the north-east half, and heavily-rolling in the south-west half. There are numerous marshes scattered about, which will supply abundance of water. The soil is a clay and clay loam, 12 to 18 inches deep in the east, and usually class 1; while in the west it is clay and sandy loam, 6 to 18 inches deep, on clay and sand subsoils, and class 2. Along the eastern boundary, there is a creek or chain of small pools, which crosses the line several times in Sections 25 and 36. Low bottom lands, wet in spring, were crossed.—*P. R. A. Belanger*, 1883.

- 28. Outlines.**—North, very hilly and broken, with a superabundance of water in the valleys. Soil, clay loam, 8 to 20 inches deep, and class 2, mostly fit for pasturage.—*T. Fawcett*, 1883.

The north-west half of this township is hilly, and the soil is rated 2nd class on account of its roughness, though it is composed of clay and clay loam. The south-east half is level or undulating prairie, and ranks 1st class. In the west the soil is sandy and clay loam, from 10 to 18 inches, on a sand and clay subsoil. Classes 2 and 3. In the east the soil is clay and clay loam, 12 to 18 inches deep. Class 1. In Section 24 a long, narrow lake, running N.E. was crossed. This lake is about 1 mile long by 25 chains wide, the water from 3 to 6 feet deep, and very good. A large alkaline lake, $2\frac{1}{2}$ miles long by 40 to 60 chains wide, and from 6 to 10 feet deep, was crossed in Section 13.—*P. R. A. Belanger*, 1883.

- 29. Outlines.**—West, hilly and rolling prairie, with several sloughs. Soil, sandy loam, about 6 inches in depth, resting on a sand subsoil. Class 2. East, hilly prairie. Soil, sandy loam, Class 3. Hills range from 50 to 150 feet in height. No water along this line.—*J. A. Maddock*, 1883.

The south boundary was run over several deep ravines and high ridges, the drainage being south-westerly.—*T. Fawcett*, 1883.

- 30. Outlines.**—This township is rolling and level. Soil, sandy and clay loam, about 6 inches deep, resting on a sand and clay subsoil. Class 2. Eagle Creek crosses from Section 18 to 25, flowing east; current, 1 mile per hour; muddy bottom; water not fit for use.—*J. A. Maddock*, 1883.

- 31. Outlines.**—The west boundary is in open, gently-undulating to rolling prairie, with clay and clay and clay loam soil. First class. The foot of the Coteau du Missouri rests about the centre of Section 30. The face of the Coteau is very stony. The east boundary, along Sections 1, 12 and 13, is in gently-undulating, open prairie, with dark, heavy clay soil; first class. The balance of this line is

in open, rolling prairie, with clay loam soil ; first class also. The Coteau du Missouri commences at the southern side of Section 24. A small creek, course easterly, crosses on Section 36.—*F. W. Wilkins*, 1883.

32. *Outlines*.—North, hilly prairie, with good soil and abundant pasturage.—*E. Bray*, 1883.

The west boundary is in open, rolling prairie, with clay loam soil, for the most part classed first throughout. The east boundary is in rolling to heavily-rolling prairie, with a few small fresh-water marshes scattered along it. Soil, clay loam ; first class.—*F. W. Wilkins*, 1883.

33. *Outlines*.—The west boundary is in rolling to heavily rolling prairie, with clay loam soil ; classes 1 and 2. The east boundary is in heavily-rolling to hilly prairie, with a good many ponds and small marshes, and some very stony places. Mostly class 2.—*F. W. Wilkins*, 1883.

Hilly prairie along the south boundary, with a good soil and excellent pasturage.—*E. Bray*, 1883.

34. *Outlines*.—The west boundary crosses Sections 6, 7 and 18, in heavily-rolling to hilly country, with a few small marshes and stony places : second class. Section 19 is rolling prairie : first-class. Sections 30 and 31 are very marshy : fourth-class.

The east is open, rolling prairie, with sand loam soil, getting lighter to the south. Sections 1, 12 and 13 are class 2. Sections 24, 25 and 36 are class 4.—*F. W. Wilkins*, 1883.

35. *Outlines*.—West, rolling prairie. Section 1 is marshy, and third class. Sections 7 and 18 are second class. The balance of the line is first-class. The soil is generally sand loam. East, rolling country, occasionally broken into sandy knolls, and classes 3 and 4, with the exception of Section 36, which is class 1. Sections 1, 12 and part of 13 are pretty well covered with timber, principally poplar—some of which is of sufficient size for building purposes. This wooded tract is about 6 miles east and west, and 2 miles wide, and contains a large amount of fuel.—*F. W. Wilkins*, 1883.

36. *Outlines*.—North, the soil is light, and grows short grass. There is a fair extent of timber about 6 miles south, 8 to 12 inches diameter.—*W. A. Ashe*, 1882.

West, open, rolling prairie. Sections 6, 7, 18 and the south half of Section 19 have a clay loam soil, and are first-class. The north half of Section 19, the whole of Section 30, and the south half of Section 31, are in an alkaline lake, reaching about 4 miles to the west and 6 to the east. This lake is a most foul-smelling body of water, and it is next to an impossibility to go near it.—*F. W. Wilkins*, 1883.

East, open, rolling prairie, with clay loam soil. Classes 1 and 2.—*F. W. Wilkins*, 1883.

37. *Outlines*.—Centrally, open, rolling prairie. Soil, class 2.—*J. S. Dennis, jnn.*, 1878.

Open, rolling prairie. Water scarce. The soil is chiefly first-class, being a clay loam, varying from 4 to 6 inches, on a clay subsoil, excepting at the eastern part of the township, where it merges into a gravelly clay.—*A. G. Cavana*, 1883.

South, the soil is light, with short grass.—*W. A. Ashe*, 1882.

- 38.** *Outlines.*—This township is open rolling, prairie. Water scarce. The soil is chiefly first class, being a clay loam, varying from 4 to 6 inches, on a clay subsoil. A lake in the north-west corner.—*A. G. Cavana*, 1883.

- 39.** *Outlines.*—Going south, on the west boundary, the first two miles is very much broken ; the southerly portion is more level, but poor, stony land. The northerly portion of the east boundary is broken and stony. The southerly is more level, but very stony and poor land.—*H. D. Ellis*, 1883.

- 40.** *Outlines.*—North, hilly to rolling, and much cut up with ponds. The soil is of fair quality, although the ridges are stony. This township is very hilly and broken. There are numerous lakes and ponds. The general character of the land is very poor and stony. A trail passes north to Battleford through the centre.—*G. B. Abrey*, 1882.

- 41.** *Outlines.*—East, rolling and hilly prairie, with poplar and scrub. Alluvial soil, 10 to 12 inches deep, resting on a clay subsoil. Classes 3 and 4. Black and white poplar, ranging from 8 to 12 inches in diameter. Water plentiful in ponds and laklets.—*H. D. Ellis*, 1883.

Sub-division.—Only sections 34, 35 and 36, and the north halves of Sections 25, 26 and 27, are available for settlement, the balance of the township being in Indian Reserves. These sections are all rolling prairie, with bluffs of poplar and willow scrub. Some of the poplar is quite large. There are several lakes, and plenty of water. Several trails cross to Battleford, and there were three settlers at the time of this survey.—*Dumais and Michaud*, 1884.

- 42.** *Outlines.*—West, rolling and hilly prairie, for the south two-thirds, with clumps of willow and poplar. In Section 7 the line crosses a trail, and in 31, a large lake, which submerges nearly the entire section. Section 30 is rolling.—*H. B. Proudfoot*, 1883.

The east boundary traverses chiefly prairie and bluffs. The land is hilly, and much broken by gullies and swamps. The Saskatchewan River crosses Section 36, also the Battleford trail.—*H. D. Ellis*, 1883.

Sub-division.—There is some very good land in this township, but part of it is much broken by the foot of the Eagle Hills and gully of Cooper Creek, which runs through Sections 7, 8, 9, 10, 11 and 12. The soil is a good black and sandy loam, 3 to 1½ inches deep, on a clay subsoil. The Saskatchewan River passes the north-east corner of Section 36. One-third of the township is open prairie, and two-thirds is covered with poplars, birch and willow scrub, good for fuel and fencing. There are three settlers on Section 3, who have been there for three or four years, who have good improvements, and who have uniformly raised good crops.—*Dumais and Michaud*, 1884.

- 43. Outlines.**—West, a plateau of first class land extends south to the Battle River, which is crossed in Section 30. After ascending the south bank of the Battle River Valley—which is here about 80 feet high—a half section of clay—some of which has been used for brick making—is crossed. The country southwards then becomes very sandy, with considerable poplar scrub on the ridges. The east boundary lies over prairie and first class agricultural land.—*J. K. McLean*, 1883.

Sub-division.—The Saskatchewan River crosses diagonally, from Section 31 to Section 1, flowing south-east in a valley about 150 feet deep, and has a current of 4 miles an hour and an average depth of about 15 feet. The Battle River enters on Section 30 and joins the Saskatchewan on the south-east corner of 21. A long narrow lake crosses into the township in Section 24, and extends entirely across it, while another crosses the south boundary in Section 1. North of the Saskatchewan River the land is excellent for farming or stock. South of the Battle River the soil is poor and light. A deep flat skirts the Saskatchewan River on the south, fit only for hay and pasture lands. Battleford town limits fall within this township, and a considerable number of settlers are located hereabouts, who have built houses and have areas of land under cultivation. The telegraph line and Edmonton trail cross through Battleford. There is plenty of all classes of wood and scrub.—*R. Laurie*, 1883.

- 44. Outlines.**—North, the country is rolling and level. Soil is a sandy loam, from 4 to 10 inches deep, resting on a sandy subsoil. Class 2. Surface is dotted with poplar and willow bluffs. In Section 33 the line is crossed by a cart trail, and in 31 the new trail to the Turtle River was crossed. The line crossed a large lake in Section 32.—*W. A. Ashe*, 1883.

West, first class land, although portions are stony. There is a considerable amount of timber, sufficiently large for fuel or fencing. The North Saskatchewan River is crossed in Section 6. After crossing this river there is a plateau of first class land. There is a great deal of poplar timber and willow scrub along the eastern boundary. There are also several large marshes or ponds. The Fort Pitt trail crosses Section 25. It is all first class agricultural land in this direction.—*J. K. McLean*, 1883.

Sub-division.—All first class farming land, open prairie, well watered and wooded. The Saskatchewan River crosses through the south-west corner. There is a fresh lake in Sections 23 and 24, and a hay marsh in 19. There are a few settlers in this township who have built houses and ploughed their lands. The river is about 80 chains wide, and 10 feet deep in the channel, which is very tortuous; current, 4 miles. The H. B. Co.'s reserve lies in the south-west corner.—*R. Laurie*, 1883.

- 45. Outlines.**—As it appeared from the southern boundary, the surface is rolling, and has an excellent quality of sandy loam soil. Class 2. The country was dotted with poplar and spruce, and as many as four trails crossed the line.—*W. A. Ashe*, 1883.

West, first class agricultural land, with poplar timber in bluffs. East, open prairie, alternating with poplar, averaging 6 inches in diameter. Soil, clay and sand loam, from 8 to 12 inches deep, resting on a clay subsoil. Class 1. No water along this line.—*J. K. McLean*, 1883.

Sub-division.—Is thickly covered with bluffs of small poplar and willows, except the south-west corner, which is open prairie. The timber is small, and generally only suitable for firewood and and rails. The soil is very good, and ranks first class, except parts of Sections 34, 2, 1, 3, 10, 11, 16 and 17, which are second class. The country is rolling, but with no hills of any size. Water is very scarce, and only a couple of swamps contain water late in the summer; but there are several large hay flats, which seem to have sufficient water to make excellent hay grow.—*T. Drummond*, 1884.

46. *Outlines*.—West, first class agricultural land, with poplar timber in bluffs. Is nearly all open prairie. A few bluffs of poplars and some scrub willows are seen here and there. A large lake, bearing east and west, and about one mile broad, lies on Section 12. A swamp of the same breadth joins this lake to another large one in the west, so that nearly all the southern part of this township is covered by water. A creek of about one chain wide is met north of Section 13, and was crossed again in Section 24. This creek discharges its water into the aforementioned lake. North of Section 25 a morass, varying in width from a few chains to half a mile, extends to several miles west. This township is rolling country, with a sandy loam soil; generally class 2.—*J. I. Dufresne*, 1884.
47. *Outlines*.—In this township there is a fresh-water lake, from 4 to 5 miles long, and 1 to 2 miles wide. The peninsula between this lake and Jack Fish Lake, in the next range west, is first class agricultural land.—*J. K. McLean*, 1883.

Hilly prairie, with a good sandy loam soil. Some parts, however, are very stony; generally it is class 1½. Bluffs of small poplars and scrub willows are numerous. A creek, 50 links wide, having very good water, meanders through Section 1, crossing the east boundary five times. The banks of this creek are 120 feet high, and are thickly covered by scrub poplars and willows.—*J. I. Dufresne*, 1884.

48. *Outlines*.—North, rolling and level prairie. Soil, sandy and clay loam, gravel in places, with sand and clay subsoil. Class 2. An old trail crosses the line in Sections 33 and 36. In Section 31 the line is crossed by a brook, flowing south. Poplar in bluffs dotted over the surface of the country.—*W. A. Ashe*, 1883.

Along the west boundary the country is hilly, with scrub on the northerly slopes.—*J. K. McLean*, 1883.

Rolling prairie, except the south-west part, which is hilly. The soil is a good sandy loam, but very stony in places, and is very dry. Grass is plentiful and of good quality. Bluffs of small poplars and scrub willows are very numerous. Some of those bluffs are very thick, the poplars being mixed with willows of about 1 inch in diameter.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XVII.

- 9.** *Outlines.*—West, rolling prairie, with an occasional marsh. In Section 20 there is a fair sized lake. The soil is a shallow loam. East, rolling prairie, with numerous sloughs. The soil is a good but shallow clay loam, and alkali appears in some places. A branch of Old Wives' Creek runs east through the south half. There are a great many boulders along the bank of the creek.—*A. F. Cotton, 1883.*
- South, surface undulating prairie. Soil, a rich clay loam, underlaid with clay. Several sluggish streams were crossed, which appear to flow towards the Swift Current Creek. Several dry marshes and hay meadows occur.—*T. Fawcett, 1882.*
- Sub-division.*—Rolling and broken. Soil, sandy loam on clay subsoil; generally class 2, but some classes 3 and 4. Fair land for grazing and farming. No wood. There are several alkaline lakes throughout the township.—*J. L. Michaud, 1883.*
- 10.** *Outlines.*—West, rolling prairie, with only a few marshes. Soil, a shallow loam. East, undulating prairie, as far as Section 12; then hills rise, which form the watershed between Swift Current and Old Wives' Creek. These hills are 100 feet high, the summit being reached in Section 24, where a plateau extends as far as Section 25. The land then falls to the north. The soil is a good but shallow clay loam. A few small sloughs were seen.—*A. F. Cotton, 1883.*
- Sub-division.*—Rolling, undulating and unwooded. The southern portion gently rises to the south, being the eastern end of the Cypress Hills. Soil, sandy loam on clay subsoil. Classes 2 and 3 for farming. Water is good and fresh in the marshes.—*J. L. Michaud, 1883.*
- 11.** *Outlines.*—West, rolling prairie, with an occasional marsh containing water. Soil, a sandy loam. Sections 36 and 25 are high-rolling prairie; the sections south of these are gently-rolling. The soil is a clay loam and gravel. There is very little water along the east line, except a large marsh which lies in the south-east corner. Swift Current Creek flows northwards from the north-east corner.—*A. F. Cotton, 1883.*
- Sub-division.*—Rolling and broken prairie, stony in places. Soil, sandy loam on clay subsoil; class 2; fair farming land. There are a few creeks of good water and some wood of small dimensions along the bank of the Swift Current Creek, which flows along the northern tier of sections, and which several branches join. The creek is from 50 links to 2 chains wide, and from 1 to 6 feet deep. The current is strong and the water good.—*Dumais and Michaud, 1883.*

- 12. Outlines.**—The west is rolling prairie, which is broken, between Sections 7 and 18, by the valley of Swift Current Creek. The valley is about one mile wide and 150 feet deep. The creek itself is 50 links wide and contains good water. Numerous gullies run into the main valley.—*A. F. Cotton*, 1883.

North, much broken by hills, ridges and ravines. Soil is generally clay. Large numbers of boulders, chiefly on the tops of ridges. Water mostly alkaline. This range is the north-eastern extremity of the Cypress Hills. No timber was observed upon them, except a small quantity in ravines.—*W. T. Thompson*, 1882.

Sub-division.—Rolling, undulating and unwooded prairie, partly broken by the deep gully of Swift Current Creek. The soil is a sandy loam on a clay loam subsoil, and is class 1 in the east and north and class 2 in the south. Swift Current Creek crosses the south-west quarter, flowing south, and again enters the township on Section 1, which it leaves flowing east. There is a valley and a feeder to it in the north-east quarter. The creek is from 50 links to 2 chains in width; from 1 to 6 feet deep; the current is strong and the water good. Section 1 is broken and stony. Along the creek willow cherry and maple were found. There is a lake of good water on Section 31.—*Dumais and Michaud*, 1883.

- 13. Outlines.**—Poor land on the north and west boundaries. The southern portion of Township 13 is hilly. Towards the north it becomes sandy, and finally terminating in drifting sand hills, an extension of the Great Sand Hills. In the west a few clear-water ponds were crossed.—*J. K. McLean*, 1882.

Surveyed the south and east boundaries. This township lies on the north-eastern end of the Cypress Hill District, and has, in consequence, many ridges and ravines. The soil is generally clay, with granite boulders on the summits of the ridges. There are some small trees to be found in some of the ravines.—*W. T. Thompson*, 1882.

Sub-division.—The surface of this township is rolling and undulating. The following sections are, however, rough, broken and gravelly: 21, 22, 23, 25, 26, 28, 29, 32, 33, 34, 35, 36, 11 and 14. The soil is generally poor and sandy. There is not a great deal of surface water in the township, but it is everywhere good and fresh. There is no wood.—*E. Fafard*, 1883.

- 14. Outlines.**—Surveyed the north, south and west boundaries, and find the land to be poor. The alluvial soil is usually 4 to 10 inches deep on a sandy subsoil in the north, on an admixture of clay and sand in the central west, and on clay in the south-west and south. Classes 3 and 4. There is very little water to be seen; the only ponds were in Sections 35 and 7, and these were alkaline. The Fort Walsh trail enters the township on the last-named section.—*J. K. McLean*, 1882.

East, much broken by hills, ridges and ravines. Soil is generally clay; water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Rolling and undulating prairie; soil generally sandy loam, with rich sandy subsoil, except in the north, where

the soil is very light and sandy. Water is scarce, but is fresh and good. Generally, the land is poor agricultural land; hay crop short and stunted, and classes 2, 3 and even 4. There is no wood whatever. The Canadian Pacific Railway crosses the township from Section 25 to Section 6.—*E. Fafard*, 1883.

- 15. Outlines.**—Surveyed the north, south and west boundaries. The land crossed in this survey was very poor. The alluvial soil, generally, averaged about 8 inches deep, on a clay subsoil in the west, and on a sandy subsoil in the north and south, and the grade does not run above class 3. Although there is water elsewhere in the township, water is scarce upon these lines, the largest, being a grass pond, containing fresh water, about 2 feet deep, on Section 33.—*J. K. McLean*, 1882.

Starting from the south-east corner, northwards, the surface is undulating and the soil of a good quality. In Section 24 there is a large alkaline lake, and north of this the surface is composed of drifting sand hills, which are almost devoid of vegetation.—*T. Fawcett*, 1882.

Sub-division.—Rolling, undulating and unwooded, with a poor sandy soil, unfit for cultivation. All the south-east of this township is blown sand hills. The west is hilly, occasioned by a large lake in the next range, west. The water of this lake is fresh; but throughout this township the water is alkaline.—*E. Fafard*, 1883.

- 16. Outlines.**—Going west, on the north boundary, the first three sections are barren sand, with a few bluffs of black cherry. The remainder of the range, although essentially sand, assumes the usual prairie herbage. Going southward from Section 36 there is an alkaline lake, with an extremely boggy beach, and in Section 24 another of like nature. The soil of the beach, within half a mile of the lake, appears to be thoroughly saturated with salts. Southward the surface is undulating and the soil of better quality.—*T. Fawcett*, 1882.

West, rolling, with low sand ridges. A range of sand hills, 60 feet high, runs north and south through Sections 6 and 7. In some places the alluvial soil is 6 inches deep, in others there is none at all. The subsoil is sand. Classes 3 and 4. Water is scarce, and alkaline. South, rolling prairie. Alluvial soil, from 6 to 10 inches deep, with sand subsoil. Class 3. A large grass pond, containing fresh water, 2 feet deep, was crossed in Section 4.—*J. K. McLean*, 1882.

Sub-division.—Rolling and undulating. Soil, poor and sandy; hay, poor and short; nothing but alkaline water.—*E. Fafard*, 1883.

- 17. Outlines.**—West, dry rolling prairie; fair farming land. Soil and subsoil, sand. Classes 2 and 3.—*J. Dudderidge*, 1882.

Going north, on the east boundary, the soil varies from sand to a rich clay loam. In Section 13 is a very alkaline flat, which drains to a large lake east of the line. The surface becomes very hilly in Section 24. Several fresh-water springs occur in the coulées intersecting the incline. Tops of hills are stony. Sections

1, 2 and 3 are very barren and sandy, and, between 2 and 3, very alkaline. There are a few bluffs of black cherry. Going westward, Section 4 has an alkaline lake, and, with part of Section 5, is a light sandy loam. The balance, including Section 6, contains hills of drifting sand.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie Soil, deep, sandy loam, generally class 1. Good water in the lakes and marshes. No timber of any kind.—*J. H. Ogilvie*, 1883.

18. *Outlines*.—North, open prairie. Sections 31 and 32 gently-rolling, with heavy clay soil. Class 2. Sections 33 and 34, which are crossed by a high, prominent ridge, have a sandy loam soil, with some gravel, and are very stony in general. Class 3. Sections 35 and 36 are rolling, with fair clay loam soil. Class 1.—*F. W. Wilkins*, 1882.

West, dry, rolling prairie; fair farming land. Soil is sand and clay loam; subsoil is clay. Classes 1 and 2.—*J. Dudderidge*, 1882.

Going northward, on the eastern boundary, the surface is somewhat broken. Fresh-water marshes are of frequent occurrence, and the soil is generally a clay loam on a heavy clay subsoil.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie, with a deep, sandy loam soil, and generally well up to class 1. The north-east is heavily-rolling. Marshes are fairly distributed, but rather more to the eastern side. In these the water is fresh. There is no timber of any kind. The cart trail to Qu'Appelle crosses the north-east corner of the township.—*J. H. Ogilvie*, 1883.

19. *Outlines*.—West, rolling and undulating prairie; thin grass. Soil and subsoil is grey clay. Classes 2 and 3. Trail to the Red Deer Forks crosses the line in Section 6. Several coulees and ravines were crossed, but no water. South, open and rolling prairie. Soil and subsoil, clay and clay loam. Class 2. The east sections are very hilly and broken; stony in places. Class 3. Water scarce.—*F. W. Wilkins*, 1882.

East, rolling and hilly prairie. Soil, 3 to 5 inches deep; subsoil sandy. Classes 2 and 3. A large marsh or pond extends over the north half of Section 1. The land is of fair quality.—*E. Bray*, 1882.

Sub-division.—Is an undulating prairie. Soil, generally sandy loam, of fair quality, except in the eastern sections, where it is a hard clay, of little use for agriculture. A good sized lake of fresh water occurs on Sections 1 and 11. There is no timber.—*J. H. Ogilvie*, 1883

20. *Outlines*.—Going west, on the north boundary, the first four sections are good rolling land, while the next two are hilly and stony. The Saskatchewan River is here about 30 chains wide. As the land on each side slopes toward the river, the banks are not more than 100 feet high. East, the Saskatchewan River crosses at the south-east of this township. Land on each side of the river is broken by hills; but away from the river the land is of very fair quality.—*E. Bray*, 1882.

West, very much broken by gullies. Soil is heavy clay. Antelope Creek was crossed in Section 18; two others were crossed in Sections 19 and 31. In the north half of 31 the land slopes toward the valley of the Saskatchewan River.—*F. W. Wilkins*, 1882.

Sub-division.—Undulating prairie, with clay or clay loam soil, varying from class 2 to class 3. The South Saskatchewan flows through the township in a south-westerly direction, from the north-west corner to the south-east corner, where the surface is considerably broken up by ravines. No wood.—*J. H. Ogilvie*, 1883.

- 21. Outlines**.—West, rolling prairie. Soil is sandy loam. Second class. In Section 6 the line crosses the South Saskatchewan River. With the exception of the river and a marsh in 31, no water was seen along the line.—*G. C. Rainboth*, 1882.

Sections 1 to 4 are good rolling land, while Sections 5 and 6 are broken, stony and hilly, and are in the Saskatchewan Valley, which crosses here. East, rolling prairie, with occasional marshes of good water, and fair to good soil.—*E. Bray*, 1882.

Sub-division.—Rolling prairie, except a strip two miles wide in the north of the township, which is very broken and hilly. The soil in the hills is a light sandy loam on a clay subsoil, and the remainder is a heavy clay loam; generally class 1. There are a few ponds of good water among the hills.—*J. Stewart*, 1883.

- 22. Outlines**.—North, rolling and undulating. Soil is sand loam, about 6 inches deep, with a clay subsoil. Class 2. An old trail crosses the line in Section 33. In Section 34 a range of hills, running north and south, from 125 to 150 feet high, crosses the line. West, mostly all level prairie. Soil is sand loam, from 4 to 6 inches in depth, resting on a sand and marly clay. Class 2. In Section 30 is a large marsh, which extends all along the line across Section 31.—*G. C. Rainboth*, 1882.

East, rolling prairie, with occasional marshes of good water, and fair to good soil. Near the north boundary line there are some ravines, which appear to have their outlet to the north-east.—*E. Bray*, 1882.

Sub-division.—Generally, the surface is rolling. Southwards it is hilly and very broken, extending from Township No. 21, with a light sandy loam on a clay subsoil, and with some ponds among the hills. Soil, in other parts—especially east and west—is a clay loam. Class 1. No wood.—*J. Stewart*, 1883.

- 23. Outlines**.—West, level and undulating prairie. Soil, clay loam, 6 inches deep, clay subsoil. Class 1. A large marsh takes up the greater part of Section 6 and half of Section 7. South, rolling and undulating. Soil is sand loam, about 6 inches deep, with a clay subsoil. Class 2. An old trail crosses in Section 4. In 2 and 3 a range of hills, running north and south, from 125 to 150 feet high, crosses the line.—*G. C. Rainboth*, 1882.

East, level prairie, of a first-class clay soil, which extends, without intermission, to the north side of a ravine 100 feet deep

and half a mile wide, near the south line. This ravine contained no water and the banks were stony.—*T. Kains*, 1882.

Sub-division.—Broken and hilly in the south-east half, and rolling and level in the north-west half. The easterly and westerly tiers of sections are a clay loam, and class 1. There are a good many ponds of water in the hills, and a large hay marsh, which covers Section 6 and parts of 5 and 7. A valley, with a level bottom, crosses the south-east quarter.—*J. Stewart*, 1883.

- 24. Outlines**.—The easterly sections, south of the north line, contain high hills, from 150 to 200 feet above the adjoining prairie. Section 31 is high, dry and undulating, having a few spring sloughs and a clay loam soil of first rate quality. The whole eastern boundary is similar to the east part of the north, from which it appears that the whole north-easterly half of this township is broken and hilly.—*T. Kains*, 1882.

West, level prairie. Soil, clay loam, from 6 to 8 inches, on a clay subsoil. Classes 1 and 2. No water along this line.—*G. C. Rainboth*, 1882.

Sub-division.—North-east, very broken and hilly. Soil sandy loam, and stony on the hills. The south-west half is a level prairie of heavy clay loam. Class 1. There is water among the hills, but none on the level.—*J. Stewart*, 1883.

- 25. Outlines**.—West, heavily-rolling or hilly prairie. Soil, sandy loam and clay, 12 and 18 inches, on a clay and sand subsoil. Classes 2 and 3. Water scarce. A creek in Section 30. East, hilly prairie. Soil is a clay loam, about 18 inches. Classes 1 and 2. Ponds and marshes containing good, fresh water were crossed. On the hills, which range from 50 to 100 feet in height, the soil is sandy and stony. Trail to Battleford was crossed in Section 25 which is also occupied by a large hill, measuring, where crossed by the east boundary, about 250 feet above level prairie. Numerous ponds and hay marshes occur in this township. The soil is a rich clay loam, well adapted for farming purposes.—*P. R. A. Belanger*, 1883.

The whole of the southern boundary, with the exception of the extreme western portion, consists of high and broken prairie. The best is high and undulating. The whole has a first class clay or clay loam soil, and there are a few dry spring sloughs.—*T. Kains*, 1882.

Sub-division.—Hilly and stony. Soil, light clay, and all-clay subsoil; may be rated as class 2. Water can be found on the lower levels. No wood.—*F. E. Brunelle*, 1883.

- 26. Outlines**.—This Township ranks nearly the same as Township No. 25. The west is rolling and hilly, with a deep sandy and clay loam soil on a clay subsoil, and classes 1 and 2. In the hilly part the country is stony. Towards the east the surface is all rolling and undulating, with a deep clay and clay loam soil. Class 1. The soil, all round, is excellent for wheat and general farming. Sections 25 and 36 are more hilly than the rest. There is plenty of good water in hay marshes and small ponds.—*P. R. A. Belanger*, 1883.

Sub-division.—The surface of this township is principally rolling prairie, with light, clay soil, 4 inches in depth, class 2, over clay subsoil. The north-eastern half is dotted here and there with hay marshes or shallow ponds. A small alkaline lake lies between Sections 22 and 23. The south-western half is very dry, and good water is very scarce in any part. There is some good farming land, but the land is especially adapted for grazing. There is no wood whatever. A cart trail passes through the north-eastern portion of this township.—*F. E. Brunelle*, 1883.

- 27.** *Outlines.*—The surface is generally rolling and hilly. In the west the soil is a deep clay or clay loam. Classes 1 and 2. In the east it is a clay and sandy loam on a clay and sandy subsoil. Class 2. Hay marshes and ponds were very numerous, especially in the east. In the southern portion of the township the hills are more inclined to be rolling than in the north. A well beaten trail, supposed to lead to Battleford, crosses the township.—*P. R. A. Belanger*, 1883.

South, rolling prairie. In Section 4 a cart trail.—*F. E. Brunelle*, 1883.

- 28** *Outlines*—North, very hilly, with an over supply of water in the valleys, in marshes and ponds. Soil, clay loam. Classes 1 and 2.—*T. Fawcett*, 1883.

Is very hilly, principally in its centre, where there is a large chain of high hills or bluffs, about 100 feet above the level prairie, running from north to south. On the west, the soil is clay and clay loam, from 10 to 18 inches deep, with a clay subsoil. Class 2. In the east the soil is sandy and clay loam, from 10 to 18 inches in depth, with a sand and clay subsoil. Classes 2 and 3. Large hay marshes are numerous all over, some of them containing water 3 feet deep.—*P. R. A. Belanger*, 1883.

- 29.** *Outlines.*—Is undulating prairie to the south, and rolling and broken to the north. The soil is chiefly sandy loam, 6 inches in depth, resting on a sand subsoil. Class 2. In the north-west it is a clay loam. Sections 30 and 31 are broken prairie.—*J. A. Maddock*, 1883.

Along the south there are several deep ravines and high ridges, the drainage being south-westerly.—*T. Fawcett*, 1883.

- 30.** *Outlines.*—Rolling and broken prairie. Soil, sandy and clay loam, about 6 inches, on a sand and clay subsoil. Classes 2 and 3. In Section 19 an old branch of the Battleford trail was crossed. A large marsh was crossed in Section 30, and in 31 poplar and ash were seen along the valley of Eagle Creek, which crosses the township flowing east. The bed of a creek, almost dry, was crossed by the line in Section 36.—*J. A. Maddock*, 1883.

- 31.** *Outlines*—The west boundary across Sections 6, 7 and 18, is in hilly prairie. Section 6 and the south half of Section 7 are second class. Sections 18 and 19 are fourth class. Sections 30 and 31 being in gently-undulating, open prairie, with dark, heavy clay soil, are first-class. Section 18 is very much broken by the gullies of the escarpment of the "Coteau du Missouri." These gullies con-

tain much wood—ash, maple and poplar—of a fair size. Section 19 is almost entirely occupied by Eagle Creek and its valley, which here reaches close up to the Coteau. Eagle Creek is 150 feet below prairie level on the north side; but on the south side the rise is fully 300 feet to the level of the country to the south. The rise of the Coteau has here to be added to the general depression of the valley. The east boundary is in open, gently-undulating to rolling prairie, with clay and clay loam soil; first-class. The foot of the “Coteau du Missouri” reaches about the centre of Section 25. The face of the Coteau is very stony.—*F. W. Wilkins, 1883.*

- 32. Outlines.**—Rolling prairie, with a second class soil along the north boundary.—*E. Bray, 1883.*

The west boundary was run over gently-undulating, open prairie, with heavy clay soil. First class. A small creek, with good water—running in a valley about 20 feet in depth—crosses this line in Section 19; course, westerly. Good water is not easily procured on this heavy clay land. The east boundary lies over open, rolling prairie, with clay loam soil for the most part. Classed first throughout.—*F. W. Wilkins, 1883.*

- 33. Outlines.**—West, across Sections 6, 7 and 18, is a gently-undulating clay plain, and first-class. Section 19 is mostly taken up by the escarpment of the “Coteau du Missouri,” is a good deal broken, and is in part very stony. Classes 2 and 4. Sections 30 and 31 are heavy, rolling, open prairie, and first and second class. The east boundary was surveyed over rolling to heavily-rolling prairie, with clay loam soil. Classes 1 and 2.—*F. W. Wilkins 1883.*

South, rolling prairie. Soil, class 2.—*E. Bray, 1883.*

- 34. Outlines.**—West, heavily-rolling land in the south, and hilly country in the north. Some of the hills at the north are gravelly. Mostly second class. East, Sections 1, 12 and 13 are heavily-rolling to hilly, with a few small marshes and stony places. Second class. Section 24 is rolling prairie. First class. Sections 25 and 36 are very marshy. Fourth class.—*F. W. Wilkins, 1883.*

- 35. Outlines.**—West, open rolling prairie, mostly first and second class, with portions third and fourth class. Section 6 is crossed by a stony ridge, and 7 has a few conical hills. Section 30 is crossed by two parallel valleys, bearing north-westerly and south-easterly. These valleys are about 100 feet in depth, and their sides are conical, with boulder stones. Long, narrow lakes, with extremely salt water, are contained in both valleys, and a small quantity of poplar grows on the south bank of the most southerly one. These valleys are remarkable, in that they appear to belong to a series (found in Townships 35 and 36, in Ranges 17, 18 and 19), and are always seen in pairs, and having no outlet, present the appearance of ditches not intended for drainage. East, rolling prairie. Section 1 is marshy, and third class. Sections 12 and 13 are second class. The balance of the line is first class. The soil is generally sand loam.—*F. W. Wilkins, 1883.*

- 36. Outlines.**—Open, rolling prairie, becoming hilly to the north. The soil is generally clay loam. Sections 6 to 19, inclusive, are

first class. Sections 30 and 31, are third class. A small saline lake is on Section 30, and a saline bog in Section 31. East, open, rolling prairie. Sections 1, 12, 13 and the south half of Section 24, have clay loam soil, and are first class. The north half of Section 24, the whole of Section 25, and the south half of Section 36, are in an alkaline lake, reaching about 4 miles to the west and 6 to the east, and such a foul-smelling body of water that it is almost an impossibility to go near it.—*F. W. Wilkins*, 1883.

37. *Outlines*.—Open, rolling prairie, with boulders of granite and limestone on the ridges throughout the township. Water is fresh and good. The soil is a clay loam, with clay subsoil, and rates first class. A large alkaline lake was crossed in Section 6.—*A. G. Cavana*, 1883.

Across the centre of this township—east and west—the general character is that of open, rolling prairie, with a light sandy loam soil and gravel ridges—Class 2.—*J. S. Dennis, jun.*, 1878.

38. *Outlines*.—Open, rolling prairie, with boulders of granite and limestone on the ridges throughout the township. Water is fresh and good. The soil is a clay loam, with clay subsoil, and rates first-class. In sections 6 and 7 the line crosses a large lake.—*A. G. Cavana*, 1883.

39. *Outlines*.—West, open, rolling prairie. Soil is clay loam and gravelly clay, about 6 inches in depth with a clay subsoil. Classes 1 and 2. Sloughs are numerous. In Sections 30 and 31 are scattered boulders of granite and limestone.—*A. G. Cavana*, 1883.

Going south, on the east boundary, the first two miles is very much broken; the southerly portion is more level, but poor stony land.—*H. D. Ellis*, 1883.

40. *Outlines*.—North, hilly to rolling, and much cut up with ponds. The soil is of fair quality, although the ridges are stony.—*G. B. Abrey*, 1883.

West, rolling prairie. Soil, clay loam, about 6 inches deep; clay subsoil. Class 1. Water is plentiful in sloughs. In Sections 30, 31 and 19 are scattered boulders of granite and limestone.—*A. G. Cavana*, 1883.

The whole of this township is very hilly and broken; poor stony land.—*H. D. Ellis*, 1883.

41. *Outlines*.—North, broken and hilly country, covered with poplar, birch, willow and scrub. Soil is sandy, with subsoil of clay. 1st and 2nd class. Trail crosses line in Section 35.—*Dumais and Michaud*, 1884.

Rough, hilly prairie, with numerous grass swamps and ponds. Good grazing land. In the east, scattered clumps of poplar bush. In Sections 24 and 25 the line crosses cart trails. A small creek was crossed in Section 36.—*H. B. Proudfoot*, 1883.

In the neighborhood of the southern boundary the surface is all hilly and heavily-rolling, with numerous small ponds. The soil in the bottoms is of fair quality, but the ridges are somewhat stony.—*G. B. Abrey*, 1882.

- 42. Outlines.**—Very rough and hilly, and very much broken by the Eagle Hills. Poplar wood is scattered about in bluffs, but of poor quality and small size, excepting in a few of the ravines.—*H. B. Proudfoot*, 1883.

Sub-division.—The north third of this township is level and rolling, open prairie. Soil, a clay loam, of first and second quality, on a clay subsoil. The centre third is broken and hilly, and covered with poplar scrub and willow, suitable for fuel, fencing and small building purposes. The remainder is rolling prairie, with some scrub and willow bluffs, and is composed of a sandy soil on a clay subsoil. Classes 1 and 2. Fresh water is to be found at several places, and anywhere by digging. There are many improvements made by settlers. A creek crosses the north-west sections, flowing north. Section 36 is nearly submerged by a shallow lake. The poplar timber is larger towards the east. A number of trails, bearing north and south, cross the township.—*Dumais and Michaud*, 1884.

- 43. Outlines.**—Going west, across the centre of this township, the first four miles is dotted with poplar bush. About midway there are scattered sand hills, covered with juniper, and further west the country is quite open and rolling.—*J. S. Dennis, jun.*, 1878.

West, first class agricultural land, with scrub as far south as Section 18. Sections 7 and 6 are prairie, partially hilly, but first-class. East, a plateau of first class land extends south to Battle River, in Section 25. After ascending the south bank of Battle River Valley—which is here about 80 feet high—a half section of clay—some of which has been used for brick making—was crossed. The country then becomes very sandy, with considerable poplar scrub on the ridges.—*J. K. McLean*, 1883.

Sub-division.—Contains much excellent land and also some of inferior quality, especially a group of sand hills in Sections 13, 14, 15, 21, 24, 26 and 28. To the south are a number of alkaline lakes and a number of fresh sloughs. The sand hills and the banks of the Battle River are well wooded, but elsewhere it is open prairie. Battle River crosses the north-east sections, and all the land in its vicinity has been claimed or settled upon. The houses of the settlers are mostly constructed of logs, and there is a large aggregate area under cultivation. The telegraph line and two trails cross in Section 36, another trail in 33, and a creek in Sections 31 and 32. The Swift Current trail crosses Sections 1, 12 and 13. Goose Lake was crossed in Sections 1 and 2, and Stinking Lake covers Sections 10, 11 and 12.—*R. C. Laurie*, 1884.

- 44. Outlines.**—North, level prairie, well timbered with poplar in bluffs. Soil is sandy loam, from 7 to 10 inches deep, resting on a sand subsoil. Class 2. The Saskatchewan River was crossed between Sections 35 and 36. The cart trail from Battleford to Moosomin's Reserve crosses the line in Section 34. A large lake was crossed in Sections 31 and 32.—*W. A. Ashe*, 1883.

From Battle Creek, which is crossed in Section 7 the soil is second class, being very light and sandy, covered with numerous bluffs of poplar, from 6 inches to 8 inches in diameter.

After ascending the bank south of Battle River, which is about 60 feet high, a fine area of country is passed over. The trail to Edmonton and the telegraph line were crossed in Section 19. The Saskatchewan River courses southwards along the second easterly tier of sections, and makes its exit in Section 1. East of the river, a plateau of first class land is met with. There is a reserve to the Hudson Bay Company on the east half of Sections 12, 13 and 24.—*J. K. McLean*, 1883.

Sub-division—An excellent township for farming, and excepting a small group of sand hills in Sections 10, 16, 21 and 22, it can be all rated class 1. The Saskatchewan River crosses the 12th Base in Sections 35 and 36, and, coursing southwards, leaves the township in Section 1. The Battle River runs along the southerly tier of sections, and crosses the boundary five times. A portion of the Hudson Bay Company's reserve (about 834 acres) lies in the south-east; while a portion of Chief Moosomin's Reserve lies on the north-west, comprising about 1,928 acres. Two lakes of good water, well wooded about the shores, lie within Sections 17, 18, 19 and 20. There is a considerable number of settlers in this township, having houses, stables, barns and cultivated and well-fenced farms.—*R. Laurie*, 1883-84.

- 45.** *Outlines*.—West, country is rolling and undulating. Soil is sandy loam. Class 2. Willow and poplar bluffs are very numerous. The Saskatchewan River crosses in Section 30. At this place the river is about 28 chains wide. In the valley, and north of the river, a trail was crossed. In 31 is a lake.—*H. B. Proudfoot*, 1883.

East, first-class agricultural land, with poplar timber on bluffs in the north-east.—*J. K. McLean*, 1883.

The southern sections, in the vicinity of that boundary line, are excellent for farming purposes, and have a good sandy loam soil and a fair supply of wood, especially near the river.—*W. A. Ashe*, 1883.

Sub-division—The soil is fairly good and ranks as first-class land. The country is rolling prairie, and is traversed by the Saskatchewan River and Jackfish Creek, the latter being a stream of some size, with good fresh water and low banks, averaging 15 or 20 feet high, except near the Saskatchewan where they become higher. Part of the township south of the Saskatchewan is south of the Indian Reserve. There are several settlers south of the river. The township is thickly covered with bluffs of poplar, small in size, and only serviceable as firewood and rails. The Fort Pitt and Carlton trail crosses the north-east diagonally.—*T. Drummond*, 1884.

- 46.** *Outlines*.—West, rolling and undulating. Bluffs of poplar and willow are very numerous. Soil is sandy loam, about 12 inches deep, resting on a subsoil of sand. Classes 1 and 2. Fort Pitt cart trail crosses the line in Section 30.—*H. B. Proudfoot*, 1883.

Note.—Proudfoot's west line, south of the river, lies in Moosomin's Reserve.

East, first-class agricultural land, with poplar timber in bluffs.—*J. K. McLean*, 1883.

South, prairie, with bluffs of poplar, willow and scrub. Fort Pitt and Carlton trail crosses the line in Section 4 Jackfish Creek was also crossed in this section.—*T. Drummond*, 1884.

47. *Outlines*.—West, rolling prairie. Soil is mostly 1st class. Trails were crossed in Sections 6 and 18. Line crosses Jackfish Lake in Section 19. A large marsh extends over the greater part of Sections 19 and 30. Small quantity of timber was seen.—*T. Drummond*, 1884.

Jackfish Lake covers nearly the whole of this township. It is a fresh-water lake, abounding with whitefish, pickerel and pike.—*J. K. McLean*, 1883.

48. *Outlines*.—North, hilly and broken, with poplar in bluffs. Soil and subsoil, sand and gravel; black and sandy loam noticed in a few places. Classes 2 and 3. Jackfish Creek, a stream 5 feet deep, good water, running 1 mile per hour, crosses the line in Section 32. In Section 33 another creek, 8 inches deep, crosses the line, and in 35 another.—*W. A. Ashe*, 1883.

The western part of the township is rolling prairie, with a soil which is mostly first class. In Section 6 Jackfish Lake, a large body of fresh water, was crossed, and in Section 30 there is more clear water. There is a small quantity of timber along the line.—*T. Drummond*, 1884.

The country eastwards is hilly, with scrub on the northern slopes. The southern portion of the township is largely submerged by Jackfish Lake, a large body of fresh water, abounding in whitefish, pickerel and pike.—*J. K. McLean*, 1883.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XVIII.

- 9. Outlines.**—This township is undulating prairie. The soil is a clay loam, very hard and dry, with a good deal of alkali in the west, and is shallow in the east. Small lakes or ponds occur here and there.—*A. F. Cotton*, 1883.

The south is undulating prairie. Soil, a rich clay loam, resting on clay. There are several sluggish streams, which appear to flow towards Swift Current Creek.—*T. Fawcett*, 1882.

Sub-division.—Undulating, unwooded prairie. Soil, sandy loam on sandy subsoil. Class 2. There is an alkaline lake on Sections 35 and 36, but elsewhere water is scarce. A trail crosses from Section 13 to 5.—*L. M. Dechesne*, 1883.

- 10. Outlines.**—Rolling prairie. The soil is a clay loam, in many places very shallow. There are only a few marshes.—*A. F. Cotton*, 1883.

Sub-division.—Undulating and rolling prairie, of sandy loam soil on a subsoil of sand, in some instances only about 2 inches, and often as much as 18 inches deep. Classes 2 and 3. There is good water in the lake on Section 1, and there is a pond on Section 2. A few marshes occur, but otherwise surface water is scarce. Like Township No. 9, the western portion of this township is the best, but none of it is good farming land. There is no wood.—*L. M. Dechesne*, 1883.

- 11. Outlines.**—Surveyed east and west of this township; it is all rolling prairie, with a sandy loam soil, and sometimes gravelly. Swift Current Creek flows north, near the western line, in Sections 6 and 7, in a valley 100 feet deep and half a mile wide, after which it follows a north-easterly course through the township. The stream is about 50 feet wide and 1 foot deep, water clear and sweet, otherwise there is very little water in the west, but in the east there are occasional marshes.—*A. F. Cotton*, 1883.

Sub-division.—Hilly, undulating and sandy. The north-west part is very hilly, and broken by ravines and small creeks. Soil, class 3. The south-east two-thirds of the township is undulating, with a few swamps, partly dry. Soil, class 2. Some of it is good land, with good sandy loam, about 3 inches deep. Swift Current Creek runs through the township from Section 6 to 33. This township is not up to an average for agricultural purposes.—*L. M. Dechesne*, 1883.

- 12. Outlines.**—North, much broken by hills, ridges and ravines. Soil, generally clay; large numbers of granite and other boulders, chiefly on the tops of ridges; water mostly alkaline. The north of this township rises into the north-eastern extremity of the Cypress Hills. No timber was observed upon them, except a small quantity in ravines.—*W. T. Thompson*, 1882.

The north-west corner is on the slope of the Cypress Hills. Section 31 is broken and hilly, but the remaining portions of the township are gently-rolling prairie. The soil is a good sandy loam. In the east the soil is a clay loam. In Section 31 there is a large lake, and Swift Current Creek was met with in Section 12, running through a valley 1 mile wide and 150 feet deep. The stream of the creek is about 35 feet wide, and the water is very good. Numerous gullies run into the main valley. Surface water is otherwise scarce.—*A. F. Cotton*, 1883.

Sub-division.—Undulating and sandy, and very broken by deep ravines and hills along Swift Current Creek. There are a few swamps in the north part of this township, in which water is alkaline. Some good undulating land occurs in the centre of the township; but good water is exceedingly scarce everywhere, which is a great disadvantage.—*L. M. Dechesne*, 1883.

- 13. Outlines.**—Poor land. The southern portion of the township is hilly. Towards the north the surface becomes sandy, and finally terminates in drifting sand hills, being an extension of the Great Sand Hills. North, rolling prairie, with alkali flats. Line crossed a creek in Sections 32, 33 and 34 the and Canadian Pacific Railway and the Fort Walsh trail in the north-west quarter.—*J. K. McLean*, 1882.

The south is very hilly, with a clay soil, and numerous boulders on the tops of the ridges. This township is in the north-eastern portion of the Cypress Hill Country, which is lower and less rugged than further west, and contains no wood, except some scrub in the ravines.—*W. T. Thompson*, 1882.

Sub-division.—Rolling prairie, but in the south-west part deep ravines of the Cypress Hills are met with. Soil, sandy loam, with a clay and sand subsoil; generally class 2, and some class 3. Good water can be had nearly everywhere. No wood. The Canadian Pacific Railway crosses Sections 31, 32, 33, 34, also the Fort Walsh trail.—*F. Vincent*, 1883.

- 14. Outlines.**—Surveyed all the outlines of this township. The surface is all rolling prairie. The upper soil is from 6 to 10 inches deep, on a clay and sandy subsoil in the north and east, and on a clay subsoil in the west and south, and all class 3. Section 1 is rather rolling and hilly; it is on the base of the Cypress Hills, and, with Section 2, is sandy, and is crossed by the Canadian Pacific Railway. There is an alkaline pond in Section 12, and sand-hills in 13 and 24. Taken altogether, the land is very poor.—*J. K. McLean*, 1882.

Sub-division.—Is very high and undulating. It is crossed in a southerly direction by 32-Mile Creek, the water of which is good. Some alkaline swamps occur in the north part, but the swamps in the south part contain good water. Sections 13, 14, 23, 24 are broken by small bare sand-hills, of from 25 to 50 feet high. Soil, generally, is a sandy loam, with a black, grey clay and sandy subsoil, and classes 2, 3 and 4. No wood. The C.P.R. station (Antelope) is situate here.—*F. Vincent*, 1882.

- 15. Outlines.**—Surveyed north, east and south of this township, and find the land to be generally of a poor quality. The surface in the south and east is rolling, and in the north it is high rolling. In Sections 34 and 35 the line crosses a slough, which extends south and joins a large alkaline lake. Fresh water is very scarce.—*J. K. McLean*, 1882.

West, high and rolling prairie. Part of Section 7 is high and broken. Water scarce.—*J. J. McArthur*, 1883.

Sub-division.—The easterly side of this township is sandy, and contains many alkaline swamps. A creek runs through Sections 1, 2 and 11, with excellent water. The westerly division of the township is high and rolling, and soil sandy and poor. A large lake occurs in Sections 3, 10, 15, 14, 22, 23, 27, 26, 34 and 35, another on Section 35, and a third on 25 and 36, all of which are alkaline.—*J. E. Sirois*, 1883.

- 16. Outlines.**—North. Sections 36, 35 and 34 are sandy, but the pasturage improves westward; the surface becomes more hilly and the soil a clay loam towards the extreme west.—*T. Fawcett*, 1882.

West, hills in places. A small creek was crossed in Section 18, connecting with a large alkaline lake about a mile eastwards.—*J. J. McArthur*, 1882.

This township is somewhat rolling and hilly in the south, and rolling with some level along the eastern boundary. In the south-east there are one or two fair sized marshes, but elsewhere on these lines, water is scarce. The land is poor for farming.—*J. K. McLean*, 1882.

Sub-division.—The north-east of this township is very sandy, with sand hills, and has a generally elevated surface. A large alkaline lake occurs on Sections 8, 17 and 18.—*J. E. Sirois*, 1883.

- 17. Outlines.**—Dry, rolling prairie; water very scarce. Soil sandy loam. A large alkaline slough was crossed in Section 6.—*J. Dudderidge*, 1882.

Entering this township by the south-east corner, the surface is rolling and the soil sandy. Going westwards, however, the surface becomes more hilly and the pasturage very fair, and there are some marshes and ponds in the bottoms. Before leaving the township the soil becomes a clay loam.—*T. Fawcett*, 1882.

Sub-division.—Soil, poor and sandy. Large swamps occur on Sections 13, 14, 15, 19, 20, 30 and 29. The Swift Current trail crosses Sections 12, 14, 22, 21, 30, 29. In the north-west it is rolling, prairie with very little water.—*J. E. Sirois*, 1883.

- 18. Outlines.**—The north boundary is in rolling prairie, and crossed by two ravines. Soil, a strong clay. Class 2. In Section 31 a large boggy lake of poor water was crossed. In Section 31 a marsh was crossed; the water is poor.—*F. W. Wilkins*, 1882.

Dry, rolling prairie; water very scarce. Soil, sandy loam. A large lake was crossed in Sections 7 and 18. The water is salty. On the east bank some fresh-water springs were found. In Section 31 a slough, containing good water, was found.—*J. Dudderidge*, 1882.

Sub-division.—Rolling, unwooded and gravelly prairie. A creek passes over Sections 34, 26, 25 and 24, and dries up as summer advances. Alkaline lakes and swamps occur in different parts of the township. Soil, generally poor, and class 3—*J. E. Sirous*, 1883.

- 19.** *Outlines.*—Surveyed all the boundaries of this township. The surface of the west and the western two-thirds of the north is open and rolling, while it is hilly along all the south, and in the east centre and north-east. The soil is generally heavy clay, with patches of sandy and clay loam. Class 2. The west line crosses a creek in Section 7, and another in 30. Trail to Red Deer Forks crosses from the north half of 31 to the south-east corner of the township. In Section 36 Antelope Creek was crossed, flowing north. In Sections 5 and 6 Miry Lake occurs; the water is bad. Creeks flowing west were crossed in Sections 1, 12, 13 and 36.—*F. W. Wilkins*, 1882.

Sub-division—Rolling prairie. Soil, rich clay loam, 10 inches deep, on clay subsoil. Class 1. A good farming township. Antelope Creek enters on Section 3 and leaves on 36. It dries up as the season advances. Its banks and bed are rough and broken. Boggy Lake occurs on Sections 5 and 6, is shallow and marshy, contains good water, and is the resort of large quantities of ducks and geese. The old Hudson Bay trail passes through this township. This is a desirable township, both in soil and location, being near the South Saskatchewan and also near the railroad.—*W. R. Reilly*, 1883.

- 20.** *Outlines.*—The easterly half of Section 36 is rough and stony, but the remainder of the north is rolling land, of fair quality.—*E. Bray*, 1882.

West, hilly and gently-rolling prairie. Soil is heavy clay. The east is very much broken by the gullies of Antelope Creek, in Sections 1, 12, 13 and 24. Other creeks were crossed in Sections 24 and 36. In the north half of Section 36 the land slopes toward the valley of the Saskatchewan River. This township is cut up by a number of deep ravines opening into the Saskatchewan valley. Class 4. Some bush grows in the ravines.—*F. W. Wilkins*, 1882.

Sub-division.—Rolling prairie. Soil, clay loam or clay, and class 1, especially westwards. The tier of easterly sections is somewhat rough and hilly—Sections 24 and 25 being cut up by deep ravines. Antelope Creek enters in Section 1, and its valley is very broken. It ceases to flow in summer, but always contains pools. Water is scarce, except in the Saskatchewan River, flowing past the north-east corner. It is, on the whole, a desirable township for settlement.—*W. R. Reilly*, 1883.

- 21.** *Outlines.*—North, the South Saskatchewan River was crossed in Sections 32 and 33. Timber was seen in the vicinity of the river.—*J. Dudderidge*, 1883.

West, rolling prairie as far north as Section 13, where it changes to a low level plain, which extends from the Saskatchewan about three miles away on the east, across Sections 19 and 20,

in the centre of which appears a prominent hill. "Miry Creek" winds in a circuitous manner, crossing this line in Section 19. It has a width of 25 links, a depth of 4 feet, and a current of one mile per hour. Water saline, running eastward to the river. Soil is an arid clay, with innumerable fissures or cracks running in all directions, and covered with a scant growth of short grass and cactus, but without any sod. Section 31, and part of 30, is in the sand-hills, covered with scrub. East, rolling prairie. Soil is second class. In Section 1 the line crosses the South Saskatchewan River. With the exception of the river and a marsh in 36, no water along the line.—*G. C. Rainboth*, 1882

South, the easterly half of Section 1 is rough and stony, but the remainder is rolling land of fair quality.—*E. Bray*, 1882.

Sub-division.—Rolling prairie; generally class 2. The Saskatchewan River crosses the township diagonally, and has an average width of about half a mile, numerous sand-bars, several channels, and an average depth of 20 feet. The banks are high and broken inland, and are dotted with trees suitable for firewood and building. The township is a good one for settlement.—*J. Dudderidge*, 1883.

- 22.** *Outlines*.—North and east, undulating and level prairie. Soil is 2nd class. Two large marshes were crossed, one in Section 25, the other in 36.—*G. C. Rainboth*, 1882.

West, the South Saskatchewan River was crossed in Sections 30 and 31. At the place of crossing the river is about a mile and a-quarter wide. Sand hills, covered with scrub, were seen in Sections 19 and 30. No water beyond the river.—*E. J. Rainboth*, 1882.

Sub-division.—Generally rolling prairie. Soil, light sandy loam, except in the north of the township and west of the river, where sand hills occur. The Saskatchewan River runs through the township, northerly and southerly, with an average width of 50 chains, and a depth of 20 to 25 feet. There is a belt of heavy cottonwood on either side of the river, for about one mile, much of which is suitable for lumber; there is also plenty of fuel. There is a flat of excellent land along the left bank, about one mile wide. A trail passes along this flat. To the east of this flat, and covering the central sections of the township, are low sand hills, partly covered with scrub; and west of these, towards the north-east of the township, the land is somewhat low and marshy.—*J. Dudderidge*, 1883.

- 23.** *Outlines*.—Surveyed the west, south and east boundaries. The Saskatchewan River crosses the south-west corner of the township. There is some cherry, poplar and brush along its banks, and willows on an island in the stream. This corner is the only broken portion of the township; all the rest is undulating prairie, with a clay loam soil, and generally first-class. The south-east is rather swampy, there being some large marshes in Sections 1 and 12.—*G. C. Rainboth*, 1882.

Sub-division.—Level to the east and undulating to the west. Good alluvial soil, 5 to 8 inches deep, on subsoil of clay loam.

Class 1. Water scarce; a marsh occurs at the south-east corner. and the Saskatchewan River crosses about the south-west corner. The banks of the river have some cottonwood trees mixed with a thick growth of underbrush.—*E. D. Henderson*, 1883.

24. *Outlines*.—North, high, dry, undulating prairie, interspersed with a few spring sloughs, and a soil of clay and clay loam, of a first quality.—*T. Kains*, 1882.

Some level, but mostly undulating prairie. The soil is all first class; there is no water of any account in the township.—*G. C. Rainboth*, 1882.

Sub-division.—Level and undulating prairie. Soil, clay loam, 6 inches deep, on a loam subsoil. The north-east Sections 24, 25, 26, 34, 35, 36, are very level, and rather better land than the remainder of the township. There is some fine meadow land on these sections. There is little surface water and no wood.—*E. D. Henderson*, 1883.

25. *Outlines*.—Rated first and second class. The soil is a heavy clay in the west half, and clay loam, with clay subsoil, in the east half, where a range of hills runs south and north. Numerous hay marshes, with excellent water, occur in this township. A creek was crossed in Section 25, and another in 13.—*P. R. A. Belanger*, 1883.

The southern sections are high, dry and undulating. The soil is clay and clay loam. Class 1. A few sloughs occur.—*T. Kains*, 1882.

Sub-division.—Undulating and rolling prairie. Soil, light clay, some of it good farming land; but water is scarce. No wood.—*F. E. Brunelle*, 1883.

26. *Outlines*.—The soil is a heavy clay in the west half. Class 2. In the east half it is a clay loam on a clay subsoil, and class 1. On this side of the township a range of hills runs north and south. Numerous hay marshes, with excellent water, are found, particularly in the west.—*P. R. A. Belanger*, 1883.

Sub-division.—Rolling prairie, and stony. Soil, light clay on an all-clay subsoil. Poor for settlement; water scarce; no wood.—*F. E. Brunelle*, 1883.

27. *Outlines*.—Is rolling prairie, rather hilly in the east half. It has a first class clay soil, well watered by hay marshes, of which there is a large one on the west boundary, which covers parts of Sections 18, 19, 30 and 31.—*P. R. A. Belanger*, 1883.

South, rolling and stony. Very little water.—*F. E. Brunelle*, 1883.

The north is undulating east and west, and very hilly in the centre. Soil, clay loam. Class 1. Good farming on the undulating portions; plenty of water.—*T. Fawcett*, 1883.

28. *Outlines*.—Is partly rolling and partly hilly prairie. The large hills in Range 17 continue through the north half of this range, and are very rough. The soil, which is clay and clay loam, rates first and second class. A large lake occupies the south-east quarter of this township. It appears shallow. Numerous ponds and hay

marshes in the hills. In Section 6 line crosses a small creek.—*P. R. A. Belanger*, 1883.

- 29. Outlines.**—Is undulating prairie to the south, and rolling and hilly to the north. Soil, chiefly sandy loam, with clay loam and gravel in places.—*J. A. Maddock*, 1883.

South, several deep ravines and high ridges were crossed, having a south-westerly drainage.—*T. Fawcett*, 1883.

- 30. Outlines.**—Is rolling prairie, but broken and hilly to the north-west. Soil is alternately clay loam and sandy loam, with a good deal of gravel in the hills, which are from 50 to 100 feet high. Water may be obtained in the marshes. The old branch of the Battleford trail crosses in Section 24.—*J. A. Maddock*, 1883.

- 31. Outlines.**—West, generally very hilly land, much broken by ponds and marshes. It is mostly second and third class. The escarpment of the Coteau du Missouri occurs in Sections 30 and 31, on this line, and is very much cut up by gullies, and is also very stony. Immediately to the east of this line, coinciding with and forming the Coteau, for about 5 miles in a south-easterly direction, is a very high range of hills, called, on old maps, the Bear Hills. As seen from the northern boundary, these hills appear to have an elevation of about 600 feet, and to be well wooded, on the northern side, with timber of good size. The east boundary, across Sections 1, 12 and 13, is in hilly prairie. Section 1 and the south half of Section 12 are second class. Sections 13 and 24 are fourth class. Sections 25 and 36, being in gently-undulating, open prairie, with dark, heavy clay soil, are first class. Section 13 is very much broken by gullies, which contain a considerable quantity of ash, maple and poplar of fair size. Section 24 is almost entirely occupied by Eagle Creek and its valley, which here reaches close up to the Coteau. Eagle Creek is below prairie level, on the north side, about 150 feet; but on the south side the rise is fully 300 feet before the level of the country to the south is reached. The rise of the Coteau has here to be added to the general depression of the valley.—*F. W. Wilkins*, 1883.

- 32. Outlines.**—North, rolling prairie, with a second class soil. In Section 31 the line crosses Tramping Lake, near its southern extremity. The outlet, Eagle Hill Creek, flows from the southern end of this lake towards the south-east through an extensive, alkaline valley, which, during high water, will be flooded.—*E. Bray*, 1883.

West is open, gently-undulating prairie. Sections 6, 7 and 18 have dark, heavy, clay soil, and are first class. Section 19 is first class, with gravelly soil. Sections 30 and 31 lie wholly in Cactus Lake. This lake, which is of considerable size, is evidently very shallow, and is an expansion of Eagle Creek, and, like the creek, its waters are saline and disagreeable. Cacti grow in abundance on the whitish, coarse, gravelly clay, along the eastern margin of the lake. The east boundary is in gently-undulating, open prairie, with heavy clay soil. First class. A small creek, with good water (the latter not easily procured on this heavy clay land), running in a valley about 20 feet in depth, crosses this line in Section 24—course, westerly.—*F. W. Wilkins*, 1883.

33. Outlines.—West, mostly gently-undulating, open prairie, with a heavy clay soil, excepting Section 31, which is very broken and stony. Sections 6 to 30, inclusive, are first class. Section 31 is third class. The east boundary, across Sections 1, 12 and 13, is on a gently-undulating clay plain, and is first class. Section 24 is a good deal broken, and in part very stony. Fourth and second class. Sections 25 and 35 are in heavy-rolling, open prairie, and first and second class.—*F. W. Wilkins*, 1883.

South, rolling prairie, with a second class soil. In Section 6 the line crosses Tramping Lake, near its southern extremity.—*E. Bray*, 1883.

34. Outlines.—West, rolling prairie at the south, to hilly prairie at the north. Section 31 is third class. The balance of the line has a clay loam soil, and is first class. East, heavily-rolling land in the south, and hilly country in the north. Some of the hills at the north are gravelly. Mostly second class.—*F. W. Wilkins*, 1883.

35. Outlines.—West, rolling to hilly prairie, with clay loam soil, generally. First and second class. This line, in Section 1, crosses a high stony ridge; in Section 30 it crosses another of those remarkable valleys mentioned in the description of Township 35, Range 17. Both valleys have long, narrow lakes, with salt water in them. A little wood occurs on the southern bank of the most northerly one. East, in general, open, rolling prairie; for the greater part, first and second class, with portions third and fourth class. Section 1 is crossed by a stony ridge, and Section 12 has a few conical hills scattered over it. Section 25 is crossed by two parallel valleys, described in Township 35, Range 17.—*F. W. Wilkins*, 1883.

36. Outlines.—West, gently-rolling, open prairie, with clay and sandy loam soil. First class. At the southern side of Section 7 is another of those narrow valleys mentioned in Township 35, and on Section 6 is a companion valley. These valleys evidently belong to the same series of valleys referred to in Township 35, Range 17. East, open, rolling prairie, becoming hilly to the north. The soil is generally clay loam. Sections 1 to 24, inclusive, are first class. Sections 25 and 36 are third class. A small saline lake occurs on Section 25, and a saline bog in Section 36.—*F. W. Wilkins*, 1883.

37. Outlines.—Open, rolling prairie. Water good and soil first class. A large alkaline lake was crossed in Section 1.—*A. G. Cavana*, 1883.

This township is open, rolling prairie. Class 2. A large alkaline lake was crossed; but in the month of August this lake was dry.—*J. S. Davis jun.*, 1873.

38. Outlines.—Open, rolling prairie. Water good and soil first class. In Sections 1 and 12 the line crosses a large lake.—*A. G. Cavana*, 1883.

39. Outlines.—The surface is of a heavy-rolling character and the ridges are stony and gravelly. There are numerous small, dry grass marshes. The soil of the western part of the township is

first class, while that of the eastern part is second class.—*A. G. Cavana*, 1883.

40. *Outlines*.—North, dry, level prairie, which improves on the westerly side.—*G. B. Abrey*, 1883.

The surface is of a heavy-rolling character and the ridges are stony and gravelly. There are numerous small, dry, grass marshes. The soil of the western part of the township is first class, the eastern part second class.—*A. G. Cavana*, 1883.

41. *Outlines*.—North, rolling prairie. A cart trail crosses the line in Section 34. A lakelet in Section 1.—*J. L. Michaud*, 1884.

West, rolling and undulating prairie. Line crosses creek in Section 31. East, rolling, hilly, stony and marshy prairie. A couple of clear-water ponds were crossed. Good grazing land.—*H. B. Proudfoot*, 1884

South, dry and level, but improves to the west—*G. B. Abrey*, 1883.

42. *Outlines*.—Very rough and hilly, and very much broken by the Eagle Hills. Poplar wood grows in bluffs, but of poor quality and small size, excepting in a few of the ravines.—*H. B. Proudfoot*, 1883.

Sub-division.—The north-east portion—west of a line between Sections 12 and 33—is hilly and broken; the balance of the township is rolling prairie. The soil throughout is composed of a sandy loam, generally on a sandy subsoil, but in some places on clay, and is class 2 except in the south-east quarter. The township is well watered by swamps and ponds. Two considerable lakes occur in the northern tier of sections. Poplars and brush are scattered, in a belt about a mile broad, which extends diagonally across the north-east quarter of the township. A number of trails cross the township, which has some settlement in the north-east, portion on Sections 34 and 35.—*Dumais and Michaud*, 1884.

43. *Outlines*.—West, the prairie is first class for agricultural purposes, the soil being a rich, dark, sand loam. East, first class agricultural land, with scrub, as far south as Section 13, after which it is prairie, partially hilly, but first class.—*J. K. McLean*, 1883.

Sub-division.—This township is very broken and hilly. The soil is second class, is composed of loam, on a clay subsoil, and is sandy in some places. Fresh surface water may be obtained everywhere, as lakelets are well distributed about. There is abundance of poplar, scrub and willow, and some bluffs sufficiently large for fuel, fencing and small buildings. The trail to Sounding Lake crosses the southern tier of sections. There are settlers' improvements in Sections 28, 33 and 34. There is no wood in the south-west quarter of the township. A creek flows along Sections 6, 7 and 18, and another in 33 and 34.—*Dumais and Michaud*, 1884.

44. *Outlines*.—North, rolling and level. Soil, is sandy and black loam, from 2 to 10 inches deep, resting on a sand subsoil. Classes 2 and 3. Country well timbered with poplar, of from 6 to 8 inches diameter. In Sections 34 and 36 a cart trail crosses the line. The

main trail from Battleford to Edmonton and the telegraph line were crossed in Section 33. Battle River—strong current, good water—and a trail to Indian Reserve, were crossed in Section 31.—*W. A. Ashe*, 1883.

West, Sections 30 and 31 are exceedingly sandy. Fourth class. An extensive range of hills occurs here, after which the country becomes first class for agricultural purposes, the soil being a rich, dark, sand loam. There is a considerable amount of poplar and willow scrub, with occasional bluffs of poplar, averaging 8 inches in diameter. East, Section 25 is generally covered with a thick growth of poplar and willow scrub, the land being a rich sand loam, first class for agricultural purposes. From here to Battle Creek—which is crossed in Section 12—the soil is second class, being very light and sandy, covered, however, with numerous bluffs of poplar, from 6 to 8 inches in diameter. Ascending the bank south of Battle River—which is about 60 feet high—there is a fine area of country.—*J. K. McLean*, 1883.

Sub-division.—Rolling prairie, with numerous bluffs of poplar, scrub and willow, suitable for fuel, fencing and small building purposes. The soil consists of loam and sandy loam on a sandy and clay subsoil, and is generally class 2. Battle River runs south-easterly from Section 31 to Section 12, and is fed by several creeks; its course is very tortuous. The valley of the river is very wide, and consists of rolling prairie. To the south-east, the country is more broken and higher. In the valley of the river there are quite a number of settlers, and also the telegraph line and several trails. There are improvements in the south centre of the township. The four north-east sections are included in an Indian Reserve.—*Du-mais and Michaud*, 1884.

- 45.** *Outlines.*—North, Sections 32, 33 and 34 are in an Indian Reserve. Other sections are rolling prairie, with poplar and brush.—*T. Drummond*, 1884.

Undulating and rolling prairie, with willow and poplar bluffs. Battle River was crossed in Section 7, also the telegraph line. In 19 two cart trails. In Sections 12, 13 and 25 the line crosses trails. The Saskatchewan River and a small creek were crossed in Section 25. Soil, sandy loam.—*H. B. Proudfoot*, 1883.

Sub-division.—The greater part of this township is in the Indian Reserve. The balance available for settlement purposes is covered with small and scrubby poplar, good only for firewood, and that even not in great abundance. Battle River runs through Sections 6 and 7. The stream is here confined, narrow and swift, between banks which are about 80 feet high. The Indian Reserve line on the west runs parallel to the western boundary of the township, and being only about 71 chains to the east of it, there is left only a little over three-quarters of the westerly tier of sections, which, together with Section 36 and portions of Sections 25 and 35, north of the Saskatchewan River, are the only parts not included in the reserve.—*T. Drummond*, 1884.

- 46.** *Outlines.*—Undulating and rolling prairie, with poplar and willow bluffs. In Sections 7 and 18 the line crosses the Saskatchewan

River. In 7 is a creek running into the river. Turtle Creek crosses in 30, and another creek running into Turtle Creek, was crossed in 31. Cart trail in Section 25.—*H. B. Proudfoot*, 1883.

Sub-division.—This township is traversed by Turtle Creek and the Saskatchewan River. The first-mentioned stream runs in a southerly direction through Sections 30, 19, 20, 17, 8 and 9, and empties into the Saskatchewan River on the east boundary of Section 8. The Saskatchewan River runs through Sections 18, 7, 8, 5, 9, 4 and 3, and in a south-westerly direction through part of Township 45 of this range. The part of this township to the south of the Saskatchewan River is in the Indian Reserve. The township is interspersed with lakes and numerous ponds and swamps, the latter affording good hay. The soil is very good, and ranks first class, except parts of Sections 2, 3, 9, 10, 11, 14, 15, 8, 9, 17, 16, 31, 32 and 20, which are second class. Oliver's saw mill is located at the mouth of Turtle Creek, in Section 9.—*T. Drummond*, 1884.

- 47. Outlines.**—Rolling prairie, with poplar and willow. Soil is black and sandy loam. Class 1. A lake, and the trail from Turtle Creek, were crossed in Section 5. In Section 3 is another trail. Jackfish Lake was crossed in Section 24. A large marsh covers the greater part of Sections 24 and 25.—*T. Drummond*, 1884.

Is undulating prairie. The soil is of first quality, being a very rich sandy loam. A large lake, of about 2 square miles, lies in the north-west part. Bluffs of poplar are small in size and not very numerous. The trail from Fort Pitt to Carlton crosses this township diagonally.—*J. I. Dufresne*, 1884.

- 48. Outlines.**—North, rolling, hilly and broken. Soil is sandy and clay loam, from 4 to 8 inches deep, resting on a sand subsoil, with boulders and gravel in places. A few poplar bluffs are scattered over the surface. In Section 31 the line crosses a small creek. Numerous sloughs and ponds.—*W. A. Ashe*, 1883.

East, rolling prairie. Soil, 1st class. A few clear-water ponds.—*T. Drummond*, 1884.

Rolling prairie, consisting of a rich sandy loam soil. About one-sixth of this township is covered by bluffs of small poplar and scrub willows. Water, though not abundant, is sufficient.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XIX.

9. *Outlines*.—Swift Current Creek crosses the west half of Section 31. The valley is here about half a mile wide and 100 feet deep. The creek is very crooked and narrow, with cut banks. South of this, and on the eastern side of the township, the surface is undulating, with a clay loam soil, very hard and dry, and eastwards contains a good deal of alkali. A ridge of hills runs north-east and south-west, and a sluggish stream, a branch of Swift Current, flows northwards through the township.—*A. F. Cotton*, 1883.

South, surface undulating prairie. Soil, a rich clay loam, underlaid with clay. Several sluggish streams cross the township, which appear to flow towards the Swift Current Creek.—*T. Fawcett*, 1882.

Sub-division.—Rolling and undulating prairie. Soil, sandy loam, with clay subsoil, in south-east corner, and sandy subsoil elsewhere. There are creeks crossing Sections 31, 35, 23 and 2, three of which connect with Swift Current Creek. No wood. If water was more abundant this would be a good agricultural township.—*L. M. Dechesne*, 1883.

10. *Outlines*.—West, undulating prairie, broken by the ravines running into the valley of Swift Current. A good deal of sandstone is exposed in the numerous ravines. The soil is a clay loam, and stony. East, rolling prairie. Soil, a clay loam. Swift Current Creek runs in a valley half a mile wide and 100 feet deep.—*A. F. Cotton*, 1883.

Sub-division.—Broken, hilly, gravelly and stony. Soil, mostly sandy loam; classes 2, 3 and 4. Swift Current Creek crosses the township in a north-easterly direction. The east part of the township is broken and hilly, and there is no wood in any part. There is an abundant supply of water, which makes the township more suitable for grazing.—*L. M. Dechesne*, 1883.

11. *Outlines*.—West, very hilly and broken prairie, falling a little to the south. The soil is a sandy loam and gravel. In the centre of Sections 6 and 7 Collarbone Creek crosses, tributary to Swift Current, in a valley half a mile wide and 100 feet deep. The water is clear and sweet. East, rolling prairie. The soil is a sandy loam, and gravelly. The valley of Swift Current Creek crosses Sections 12 and 1, in a valley 100 feet deep and half a mile wide. The creek is 90 links wide, and 1 foot deep. The water is clear and sweet.—*A. F. Cotton*, 1883.

Sub-division.—Undulating prairie. Soil, sandy loam, on subsoil of sand. Class 2. The western part of the township is hilly. Swift Current Creek enters this township. No wood, and soil generally dry, which renders the township not up to the soil standard for agriculture.—*L. M. Dechesne*, 1883.

- 12. Outlines.**—North, rolling and undulating. Soil, sandy loam. The line crosses small creeks in Sections 36, 33 and 32, and the Canadian Pacific Railway in 31. The land, in general, is sandy, and not suitable for farming purposes, but will make fair grazing land.—*W. T. Thompson*, 1882.

Rolling and undulating prairie. The soil, all round, is a sandy loam, and very good. To the east is the northern slope of the Cypress Hills. Section 36 is broken and hilly, but the balance of this side of the township is rolling. There are two creeks in the west, which probably rise in the Cypress Hills.—*A. F. Cotton*, 1883.

Sub-division.—Rolling and undulating prairie. Soil, sandy loam. Classes 2 and 3. The township is broken by the base of the Cypress Hills crossing it in the easterly portion. No water, and only some small poplars in Sections 27 and 26, good for fuel. Soil, sandy loam. A large marsh was crossed in Sections 3 and 4.—*L. M. Dechesne*, 1883.

- 13. Outlines.**—This township, through which the Fort Walsh trail runs, is high and undulating. The south-west part is sandy. The land in the remainder of the township is a sandy loam, with a clay subsoil. North, level and rolling prairie, with very little water.—*J. J. McArthur*, 1882.

East, rolling and hilly prairie. Dry creeks were crossed in Sections 12 and 13, the Fort Walsh trail in 24, another creek, nearly dry, in 24 and 25, and the Canadian Pacific Railway in 25.—*J. K. McLean*, 1882.

South, rolling and undulating. Soil, sandy loam. Small creeks in Sections 1, 4 and 5, and the Canadian Pacific Railway in 6. Not generally suitable for farming purposes, but fair grazing land.—*W. T. Thompson*, 1882.

Sub-division.—Rolling prairie. The Canadian Pacific Railway crosses Sections 24, 23, 14, 15, 10, 9, 4, 5, and has Gull Lake Station. The Fort Walsh trail crosses the township, as also, —in a south-west direction—does Bridge Creek. Gull Lake contains fresh water, and covers part of Sections 6, 7, 8, 9, 4 and 5. Bridge Creek, and a small number of swamps, are also fresh. No wood, except some willows on small sand hills in the west. Soil light sandy loam, with a hard grey clay and sandy subsoil. Generally class 3.—*F. Vincent*, 1883.

- 14. Outlines.**—This township is high and broken, with a number of alkaline ponds, and soil of a poor quality. The north is rolling prairie, with several clear-water ponds. In Section 19 the line crosses some alkaline clay flats, and in 31 a small quantity of scrub.—*J. J. McArthur*, 1882.

East, rolling and hilly prairie. Several clear-water sloughs, but good water scarce.—*J. K. McLean*, 1882.

Sub-division.—Rolling prairie. The north is occupied by useless sand hills. The south is a very light sandy loam, on a sand subsoil, but in some places on a clay subsoil, and rates low—4th class up to 3rd class. Water all alkaline. No wood.—*F. Vincent*, 1883.

- 15. Outlines.**—Surveyed all the boundaries. The township is high and very broken, with soil of poor quality. A range of sand hills runs, from east to west, through the south part. Water is very scarce.—*J. J. McArthur*, 1882.

Sub-division.—The southerly part of the township contains numerous sand hills, also some willow bluffs. The north-western part is elevated, while the remainder is high and rolling. There are a few small lakes, some fresh and some salty. The township is not a good one for agriculture.—*J. E. Sirois*, 1883.

- 16. Outlines.**—Northwards, the country is hilly, and the soil is a clay loam or clay, while the hill tops and ridges are somewhat gravelly.—*T. Fawcett*, 1882.

Surveyed all the outlines of the township, except the north. Water, generally, was scarce. Part of a valley, in which are several alkaline lakes, extends through the north-east part of this township; and a high, broken ridge traverses the south half from south-east to north-west. The remainder of the township is comparatively level, with soil of an inferior quality.—*J. J. McArthur*, 1882.

Sub-division.—The surface in the south-west and in the east is greatly elevated; the centre is lower, and an undulating prairie. Soil, sandy loam on sand and clay. Class 3. This township contains many swamps of good water. There are salty lakes in Sections 24 and 26.—*J. E. Sirois*, 1883.

- 17. Outlines.**—Dry, rolling prairie, rising to the north-west; water scarce. Soil, sandy loam, becoming more sandy going west. An alkaline marsh was crossed in Sections 1 and 12. Several marshes, containing good water, were crossed in the north-west.—*J. Dudderidge*, 1882.

The south boundary line runs over a hilly country. Soil, clay loam or clay. Hill tops and ridges somewhat gravelly.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie. Soil, grey clay on clay subsoil. Class 3. A large soft-water swamp occurs in Sections 22 and 23, and a salt one in Section 14. The cart trail to Swift Current was crossed in Section 33.—*J. E. Sirois*, 1883.

- 18. Outlines.**—Sections 31, 32 and 33 are open, rolling prairie; remaining sections are hilly and broken. The soil is heavy clay, and clay loam. Creeks were crossed in Sections 34 and 35, and marshes in 36.—*F. W. Wilkins*, 1882.

Dry, rolling prairie, rising to the north-west; water scarce. Soil, sandy loam. A large lake, containing salt water, crosses Sections 1, 12 and 13. Fresh-water springs were found on the west banks. A slough of good water was crossed in Section 36.—*J. Dudderidge*, 1882.

Sub-division.—The western part is rolling prairie, with a soil which is third class. The eastern part is more elevated, and there are high shores to an alkaline lake which lies in the south-east of the township. This part is almost unsuitable for agriculture. Except a large marsh in the north-east, there is very little water in

this township. The Swift Current trail crosses the south-west quarter.—*J. E. Sirois*, 1883.

19. *Outlines*.—Gently-rolling, open prairie. Soil is a clay loam. The east boundary is similar, and a little stony in places. The soil is a sandy clay of more or less strength. Class 2. Creeks cross Sections 12, 25 and 36. In the latter section the trail to the Red Deer Forks was crossed. Sections 1, 2 and 3 are hilly and broken, and several creeks pass through them.—*F. W. Wilkins*, 1882.

Sub-division.—Rolling prairie, the eastern and northern sections inclining to hilliness. Sections 24, 25 and 36 are much cut by ravines, which are more or less stony. A marshy fresh-water lake is on Sections 16, 17, 20 and 21, which has good hay and covers about 314 acres. There are a number of other good grass swamps. The Edmonton trail crosses Section 36. The soil—central and east—is a good clay loam; west, it is a sandy loam, and all is rated class 1. A good township.—*W. R. Reilly*, 1883.

20. *Outlines*.—Land along the north boundary is a heavy clay, which becomes very sticky when wet. Miry Creek, a stream 15 links wide and 1 foot deep, crosses the line in Section 34. A range of rough hills occurs in Section 31.—*E. Bray*, 1882.

The east boundary is in rolling prairie. Soil, a stony clay. Class 2. The only wood was at Miry Creek, in this township, at which place a quantity of firewood could be got. Going northwards, along the western boundary, the surface is heavy rolling as far as the valley of Miry Creek. The valley is broken and rough, and the soil gravelly. North of the valley, to the north of Section 31, the surface is rolling. The Red Deer Forks trail crosses from Section 1 to 31.—*F. W. Wilkins*, 1882.

Sub-division.—The centre is rough and broken by a chain of hills, varying in height, from 150 to 200 feet, and running across Sections 2, 10, 15, 16, 22, 28, 31, 32. A branch of Miry Creek crosses Sections 16, 17 and 19. Its valley is rough, and from half to one mile broad, rising, in parts of its banks to 150 feet high. The soil here is more or less gravelly, and occasional boulders occur. Miry Creek rises in a marsh in Section 15, runs east and then northwards, through a level prairie. It has a rapid current, but is of no use for water privileges. The land, eastwards from the chain of hills, is a rolling prairie of clay loam. The land westwards is of a lighter character, and more or less stony. There are one or two good hay marshes. The Edmonton trail crosses the township. Some of the ravines afford wood suitable for fuel. This township, although broken, has excellent land.—*W. R. Reilly*, 1883.

21. *Outlines*.—West, there is a high range of hills, with a great many coulées, some of which are wooded, crossing the 6th Base near the line, and extending in a north-westerly direction through the township. Soil, second class. Miry Creek passes around the south-eastern quarter of the township in a north-easterly direction towards the South Saskatchewan. This creek furnishes about the only water available. East boundary, rolling prairie as far north as Section 13, where it changes to a low level

plain, which stretches to the South Saskatchewan, about three miles east. In the centre of this plain appears a prominent range of hills, around the base of which Miry Creek winds in a circuitous manner, crossing this line in Section 24. It has a width of 25 links, depth 4 feet, and current of one mile per hour. Water saline. The soil is an arid clay, with innumerable fissures and cracks running in all directions, and covered with a scant growth of short grass and cactus, but without sod.—*E. J. Rainboth*, 1882.

South, rolling prairie, except in the valley of Miry Creek, and in the south-west corner. The soil is a very heavy clay.—*E. Bray*, 1882.

Sub-division.—Level prairie. Soil, clay loam, class 1, but very dry. Miry Creek runs through the township from the south, and leaves in the east centre. This creek is alkaline, and of small dimensions. There is some scrub and brush in Sections 33 and 34, and there are sand hills in 35 and 36—*J. Dudderidge*, 1883.

- 22.** *Outlines.*—The northern portions of Sections 35 and 36 are obliterated by the Saskatchewan River. The balance along the north line is rolling prairie, with a soil which is scarcely up to class 2. Nearly the whole way along the western side of the township there are sand hills, which are rough and broken, and thickly wooded with scrubby poplar and brush. East, in Sections 25 and 36, the line crosses the South Saskatchewan River. At this point the river is very wide. Sand hills, covered with scrub, cover the greater part of Sections 24 and 25. These sand hills occupy the whole of this township, and appear to cross the river to the east and extend westward into the next range. Water scarce. Soil, class 3 to 4.—*E. J. Rainboth*, 1882.

Sub-division.—The southerly two thirds of the township is high sand hills, covered with scrub and patches of small poplar, suitable for fuel only. Class 4. The northerly one-third is rolling prairie, and will scarcely rate class 2. The South Saskatchewan crosses the north-east corner, and there is on its banks a belt of heavy cottonwood suitable for building.—*J. Dudderidge*, 1883.

- 23.** *Outlines.*—All undulating prairie. West, the soil is 1st and 2nd class. In Sections 6 and 7 the South Saskatchewan River crosses the line. At this place it is about one mile wide, including an island covered with cherry, poplar and willow brush. East, soil is 1st class. In the south half of Section 1 the line crosses the South Saskatchewan River.—*G. C. Rainboth*, 1882.

The Saskatchewan River courses easterly to the north of and near the southern boundary. Part of Sections 3 and 4 lie into a bend of the river, but the rest of the line is hilly, and broken by the banks of the river, which have a considerable growth of cottonwood.—*E. J. Rainboth*, 1882.

Sub-division.—The South Saskatchewan traverses this township from Section 7 to 12. On both sides of the river, from one to one and a-half miles, the surface is very broken, and the soil is very sandy. Brush grows along the river and in the ravines. A large island extends up the river for three miles, covered with

very thick brush, and has also a considerable growth of large cottonwood trees. The land extending from the poor belt along the river to the north of the townships is first class land, level and undulating.—*E. D. Henderson*, 1883.

- 24. Outlines.**—North, undulating prairie. In Sections 35 and 36 the line crosses a large marsh.—*T. Kains*, 1882.

This township is all undulating prairie. The soil is a first class one. There is no surface water to be seen anywhere.—*G. C. Rainboth*, 1882.

Sub-division—Undulating prairie. Soil, clay loam on clay loam subsoil. Class 1. Water is scarce, there being no ponds, marshes or rivulets. No wood.—*E. D. Henderson*, 1883.

- 25. Outlines.**—Rolling prairie, with a first class clay soil, well adapted for wheat cultivation. Water is very scarce along the west.—*P. R. A. Belanger*, 1883.

In Section 24 a couple of creeks cross the line, and there are a few marshes; but the supply of water is still limited.—*J. Bourgeois*, 1884.

South, high, dry and undulating prairie, interspersed with a few spring sloughs. Soil, clay and clay loam of a first quality.—*T. Kains*, 1882

Sub-division.—Undulating prairie, with a second class soil, composed of light clay and clay subsoil. It is not good farming land. There is no surface water and no wood.—*J. Bourgeois*, 1884.

- 26. Outlines.**—All rolling prairie, and well adapted for wheat cultivation, the soil being a first class clay. Water is generally very scarce. In the west, a large marsh was crossed in Section 7, and in Section 31 a creek and another marsh. Four or five marshes were met with in running the east line.—*P. R. A. Belanger*, 1883.

Sub-division.—Undulating prairie. Soil, generally class 2, being composed of light clay on clay subsoil, some of it good for grazing, but not much for farming. No wood.—*F. E. Brunelle*, 1883.

- 27. Outlines.**—All rolling prairie, with a clay and clay loam soil, ranking second and first class. A large hay marsh occupies the north-eastern sections, the water of which is gathered from the hills immediately to the north.—*P. R. A. Belanger*, 1883.

South, undulating prairie, with very little water.—*F. E. Brunelle*, 1883.

- 28. Outlines.**—North, undulating and rolling prairie. Soil, clay loam, of classes 1 and 2. A long, narrow lake, extending from Township 27, crosses Section 32. To the west of this there are large numbers of boulders in the soil.—*T. Fawcett*, 1883.

Rolling prairie, somewhat hilly. Its soil, though clay loam, rates 2nd class, on account of its being very hard and rough at its surface. It is well watered by hay marshes, ponds, and a small lake which occupies Sections 31 and 32.—*P. Belanger*, 1883.

- 29. Outlines.**—This township is rolling prairie, with hilly parts to the east, the elevations ranging from 50 to 100 feet. The soil is generally a sandy loam, with clay loam in places, and a few gravelly parts. An old trail crosses the township to Section 18, and a

branch trail to 36. A very few sloughs only were crossed—*J. A. Maddock*, 1883.

Going west, along the southern boundary, the surface appeared to be gently, undulating, and from Section 3 has a westward slope to a long alkaline lake in Section 5. This lake bears north-east and south-west.—*T. Fawcett*, 1883.

30. Outlines.—West, gently-rolling prairie. The only water along the line is a marsh in Section 7. East, rolling and hilly prairie, the hills ranging from 50 to 150 feet in height. A few sloughs were crossed. Soil, similar to Township 29.—*J. A. Maddock*, 1883.

31. Outlines.—The north of this township, west from Section 33, and all the western portion, is rolling prairie. In Section 33 the foot of the Coteau is very decidedly indicated. The east is generally very hilly, and broken by ponds and marshes. The soil is mostly second and third class. Sections 25 and 36 are very much cut up by gullies, and are very stony. There is a range of high hills immediately to the east of the east line, which are apparently well-wooded. In Section 31 a small watercourse was crossed.—*F. W. Wilkins*, 1883.

32. Outlines.—North, rolling prairie, with a second class soil. In Section 36 the line crosses Tramping Lake * near its southern extremity. The outlet, Eagle Hill Creek, flows from the southern end of this lake towards the south-east through an extensive alkaline valley, which, during high water, will be flooded.—*E. Bray*, 1883.

West, rolling prairie. A creek bed in Section 19, bearing towards Eagle Creek. East, open, gently-undulating prairie. Sections 1, 12 and 13 have a dark, heavy clay soil, and are first class. Section 24 is first class, with gravelly soil. Sections 25 and 36 lie wholly in Cactus Lake. This lake is of considerable size, very shallow, and an expansion of Eagle Creek; and, like the creek, its waters are saline and disagreeable. Cacti grow in abundance on the whitish, coarse, gravelly clay, along the eastern margin of the lake. South, rolling prairie. A small creek, flowing north, crosses the line in Section 4. In this Section is the true foot of the Coteau.—*F. W. Wilkins*, 1884.

33. Outlines.—West, rolling and hilly. Creek bed was crossed in Section 7. East, mostly in gently-undulating, open prairie, with heavy clay soil, excepting Section 36, in which an escarpment of the Coteau du Missouri occurs, rendering it very broken and stony. Sections 1 to 25, inclusive, are first class. Section 36 is third class.—*F. W. Wilkins*, 1883.

The southern sections are rolling prairie, with a second class soil. Section 1 is entirely submerged by Tramping Lake †—*E. Bray*, 1883.

34. Outlines.—West, rolling prairie. Eagle Creek crosses the line in Section 18, flowing in a south-easterly direction. East, rolling prairie at the south to hilly prairie at the north. Section 36 is

* Now Cactus Lake, which is connected with Tramping Lake by Eagle Creek.

† Properly Cactus Lake.

third class. The balance of the line, with clay loam soil, is first class.—*F. W. Wilkins*, 1883.

- 35. Outlines.**—West, undulating and open prairie. In Sections 18 and 19 the line crosses Tramping Lake. In 6 a cart trail.—*J. F. Garden*, 1883.

The east boundary is in rolling to hilly prairie, with clay loam soil, generally. First and second class. This line, in Section 1, crosses a high stony ridge. In Section 25 it crosses another of those remarkable valleys described in Township 35, Range 17, and runs close to the western extremity of another. Both valleys have long, narrow lakes, and salt water in them.—*F. W. Wilkins*, 1883.

- 36. Outlines.**—North, the soil is light, and grows short grass. Water good and fresh in all rivers and creeks.—*W. A. Ashe*, 1882.

West, undulating and open prairie. A couple of clear water ponds and several sloughs were crossed.—*J. F. Garden*, 1883.

East, gently-rolling, open prairie, with clay and sandy loam soils, and is first class. At the southern side of Section 12 is narrow valley, and on Section 1 is a companion valley. These valleys evidently belong to the same series of valleys referred to in Township 35, Ranges 17 and 18, and there described in full.—*F. W. Wilkins*, 1883.

- 37. Outlines.**—West, undulating prairie. Water may be obtained from ponds and marshes.—*J. F. Garden*, 1883.

The surface eastward is slightly rolling, and water scarce. The soil is a good clay loam on a clay subsoil, and rates first class. A couple of clear water ponds were crossed in Section 36.—*A. G. Cavana*, 1883.

- 38. Outlines.**—West, undulating, open prairie. A very large pond was crossed in Section 7, and further north a few sloughs.—*J. F. Garden*, 1883.

Eastwards, rolling. Water scarce. The soil is a good loam on a clay subsoil, and rates first class.—*A. G. Cavana*, 1883.

- 39. Outlines.**—West, even, or undulating, open prairie. Trails were crossed in Sections 30 and 31.—*J. F. Garden*, 1883.

Open, rolling prairie eastward. Stony on top of ridges. Sloughs usually dry. The soil is first class, being a clay loam, with clay subsoil.—*A. G. Cavana*, 1883.

- 40. Outlines.**—North, all prairie. Generally dry and level, from Section 32 to 36, both inclusive. Section 31 is broken by marshes. The soil, generally, is good, and the locality is desirable for settlement.—*G. B. Abrey*, 1883.

West, even or undulating, open prairie.—*J. F. Garden*, 1883.

Open, rolling prairie. Stony on top of ridges. Sloughs usually dry. The soil is first class, being a clay loam with clay subsoil.—*A. G. Cavana*, 1883.

- 41. Outlines.**—Rolling and undulating prairie. With the exception of a few sections, they may all be classed 1 and 2. Soil, clay loam, 12 inches in depth, and varying to sandy loam; sand subsoil.—*H. B. Proudfoot*, 1883.

Sections 1, 2, 3, 4 and 5 are prairie and generally dry and level, but the last section west becomes broken by marshes. The soil is generally good and the locality is quite desirable.—*G. B. Abrey*, 1883.

42. Outlines.—Rolling and undulating prairie. With the exception of a few sections, they may all be classed 1 and 2. Soil, clay loam 12 inches in depth, and varying to sandy loam; sand subsoil.—*H. B. Proudfoot*, 1883.

43. Note: All of this township, except the southerly tier of sections, are in Strike-him-on-the-back's Reserve.

44. Outlines.—Sections 36 and 25 are exceedingly sandy, and fourth class.—*J. K. McLean*, 1883.

North, country along this line is small sand hills. Trail to Poundmaker's Reserve was crossed in Section 32. Section 36 is pure sand, and hilly.—*W. A. Ashe*, 1883.

Sub-divison—Comprises only Sections 32 to 36, and the north half of 25 and 26, the balance being an Indian Reserve. The surface is very much broken up by a range of small sand hills, which occurs in Sections 32, 33 and 34. The soil is a poor light sand—class 3—and is nearly all covered with a growth of small poplar of poor quality, and with scrub and bushes. There is no water.—*Dumais and Michaud*, 1884.

45. Outlines.—North, rolling country covered with small poplar and brush. A portion of a large lake was crossed in Section 31, and another and smaller lake in 34. Trails cross the line in Sections 33, 34 and 36.—*T. Drummond*, 1884.

Undulating and rolling country, with poplar and willow bluffs. The eastern part of the township, south of the Battle River, is an Indian Reserve. The western part is very much broken by the valley of the river and the ravines falling into it. The soil here is generally sandy, and a small range of sand hills occurs. North of the river there are some large, straggling and broken lakes towards the north-west. The surface is still covered with poplar and brush, except in the extreme north-east. The telegraph line and quite a number of trails cross the township.—*H. B. Proudfoot*, 1883.

South, hilly and broken. Soil and subsoil, sand. Class 4. Broken by sand hills and scattered over with bluffs of poplar, poplar from 8 to 10 inches being met with. The trail from Battleford to Poundmaker's Reserve crosses the line in Sections 5 and 6.—*W. A. Ashe*, 1883.

Sub-division.—The Battle River crosses from Section 18 to 12. The portion south of the river is much broken by the river valley and the coulées which connect with it. The portion north of the river is rolling, with a sandy soil, except in the north-east, where the soil is a dark loam on a sandy subsoil. Classes 1 and 2. The surface is chiefly covered with scrub and small poplar. The Indian Reserve occupies Section 1 and parts of 2, 11 and 12.—*Dumais and Michaud*, 1884.

Note.—The balance of the south of these sections is an Indian Reserve.

- 46. Outlines.**—Undulating and rolling prairie. Poplar and willow bluffs and scrub. The Saskatchewan River crosses the township, flowing eastwards from Sections 30 and 31 to 12 and 13. The soil, generally, is sandy loam, some parts very good and some very poor. Cart trails were crossed in Sections 7 and 19. There are several creeks in the township running into the river. In Section 25 Turtle Creek crosses the line, and in Section 36 there is a branch connecting with it.—*H. B. Proudfoot*, 1883.

Sub-division.—The southern part is open prairie (which extends northwards for about two miles), with the exception of the south-west quarter of Section 4 and the south half of Sections 5 and 6, which are in sand hills, and are thickly covered with a growth of scrubby poplar, of little value except for firewood. North of this open belt of country, to the south of the Saskatchewan River, the country is thickly covered with bluffs of small poplar, in which the timber is useful for rails and firewood. Along the edge of the river there is a belt of solid woods, in which there is some building timber, but most of the balance is only suitable for fuel and rails. The timber on several of the islands is suitable for building purposes. To the north of the Saskatchewan River the country is more thickly covered with timber, though in the immediate vicinity of the river itself there is almost none, with the exception of a flat near the eastern part, where there is some large timber destroyed by fire. Back from the river the timber is larger, and will serve well for settlers, of whom there is a large settlement on the south side of the river. South of the river the soil is excellent, except a strip along the south boundary, which extends northwards half a section wide, and ranks classes 2 and 3. The balance is class 1, and really very fine, which is shown by the number of settlers in this part. Altogether, there are about 20 families in the township (1884), most of whom have made improvements, there being several fields of over 80 acres cultivated. Throughout the whole settlement these settlers had obtained fairly good crops—in one case 2,000 bushels of grain. It is likely that the land in this part of the country being so good, will in a few years be dotted over with farms. To the north of the Saskatchewan the soil is of poorer quality and ranks second class, being a light sandy loam. There are here several hay swamps, which are valuable to the settlers on the other side of the river, where they are scarce.—*T. Drummond*, 1884.

- 47. Outlines.**—West, undulating prairie, with poplar and willow scrub. Soil, sandy loam. In Section 31 Turtle River was crossed twice.—*H. B. Proudfoot*, 1883.

Is an undulating country, having a very rich sandy loam soil. Bluffs of poplar of large growth—being trees of 6 to 10 inches in diameter—occur. The level aspect of this township, together with its soil of very good quality and abundant supply of water, should prove very advantageous to settlers. The trail from Fort Pitt to Carlton crosses the northern part.—*J. I. Dufresne*, 1884.

South, rolling prairie, covered with poplar and willow bluffs. The soil is black and sandy loam, resting on a subsoil of gravel

and sand. Class 2. Turtle Creek was crossed in Section 2. The banks are steep and about 100 feet high. Water is about $2\frac{1}{2}$ feet deep, and the current is swift.—*T. Drummond*, 1884.

48. *Outlines*.—North, rolling and level prairie. Soil, sandy loam, about 6 inches deep, with a sand subsoil. Class 2. A few bluffs of small poplar were seen; water is abundant in sloughs and ponds. In Section 36 a small creek, $1\frac{1}{2}$ feet deep, fresh water, crosses the line. The Carlton, Fort Pitt and Edmonton trail was crossed in Section 31, and the trail from Battleford to Turtle Lake in Section 35. An old trail crosses the line in Section 32.—*W. A. Ashe*, 1883.

West, rolling prairie. Soil is sandy loam. Poplar and willow scrub. Turtle River flows generally south, almost following the line, and crossing it in Sections 30, twice in 19, once in 18, six times in 7 and five times in 6. A few sloughs were seen along the line.—*H. B. Proudfoot*, 1883.

Rolling country, of a rich sandy loam, varying in rate from first down to between second and third class. This township is generally open prairie. This is covered with poplar and willow bluffs in about equal proportions; the growth is, however, scanty, and of small size. In the north-eastern part there is a nice lake of fresh water, which is about half a square mile in area. Into this lake there are two fine creeks flowing from the north, and a large creek originates here flowing southwards. There is abundance of water in lakes of various sizes, and it is everywhere fresh.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XX.

9. *Outlines*.—West, undulating prairie, with an occasional slough. The soil is a good dark loam.—*A. F. Cotton*, 1883.

East, rolling, hilly and broken prairie. Swift Current Creek was crossed in Section 36.—*L. M. Dechesne*, 1883.

East, undulating prairie as far north as the eastern bank of the valley of Swift Current Creek, in Section 25. The valley is half a mile wide, and 100 feet deep. The creek is narrow and very crooked, with cut banks. The surface of this township is more broken than Range 19. The soil is a clay loam.—*A. F. Cotton*, 1883.

South, in Section 5, the surface suddenly drops a depth of 150 feet, forming the eastern escarpment of the Cypress Hills plateau. The slope is well timbered with poplar, which lies principally in its deep ravines and gorges. At the foot of the escarpment, and rising in it, are the Swift Current and its tributaries. The main branch crosses in Section 2, and flows through an excellent flat, half a mile wide. The banks of the coulées are generally strewn with limestone and granite boulders. The soil throughout this range is clay, underlaid in places with gravel.—*T. Fawcett*, 1882.

Sub-division.—Soil, classes 2 and 3, in the proportion of 0.38 and 0.62, consisting of sandy loam and hard clay, with clay subsoil. The surface is cut up by the ravines of the eastern escarpment of the Cypress Hills. Springs of water, and also some poplar, occur in these ravines, but the wood is in limited quantity. Buffalo hunters usually winter in these ravines, as they are suited to afford shelter. The township is a poor one for settlement.—*G. C. Rainboth*, 1883.

10. *Outlines*.—The south west is rolling, but the north-west is hilly and broken by ravines and gullies. A branch of Swift Current Creek crosses Section 18 in a valley about half a mile wide and 150 feet deep, and flows northwards through the westerly sections. The soil is good sandy loam, but is somewhat stony. There is a little bush in the valley of the creek. The east is undulating, broken by the ravines running into the valley of the creek. A good deal of sandstone crops out in these ravines. The soil is a clay loam and stony.—*A. F. Cotton*, 1883.

Sub-division.—The soil is generally a sandy loam and a clayey sand, on a clay subsoil, and classes 1, 2 and 3, in proportional surfaces, thus, 0.45, 0.27 and 0.27. Water is abundant and particularly good in the main branch of Swift Current Creek, which enters the township by Section 18 and pursues a very circuitous course. Much of the surface of the township is elevated on the plateau of the Cypress Hills, and reported to be subject to summer

frosts. Wood in small quantities, grows in some of the ravines, in Sections 32, 1, 5 and 6.—*G. C. Rainboth*, 1883.

- 11. Outlines.**—West, gently-rolling prairie. Soil, a good clay loam. East, very hilly and broken prairie, falling a little to the south. The soil is a sandy loam and gravel. In the center of Section 12, Collarbone Creek flows. It is a tributary of Swift Current, and its valley is half a mile wide and 100 feet deep. The water is clear and sweet.—*A. F. Cotton*, 1883.

Sub-division.—The north is much cut up by the ravines and the escarpment of the Cypress Hills. Along the base of the hills is an extensive alkaline flat. Swift Current Creek affords the only water in the township; the creek runs in an extensive and broken valley, which, together with the escarpment of the hills, breaks up the township very much and makes it more suitable for pasturage than farming. Some small poplars in the ravines, in Sections 4 and 5.—*G. C. Rainboth*, 1883.

- 12. Outlines.**—North, the land in general is sandy and not suitable for farming purposes, but will make fair grazing land, water mostly alkaline.—*W. T. Thompson*, 1882.

West, gently-rolling prairie, with a few sloughs, and pond holes. The soil is a good clay loam. A creek in the south half was almost dry. East, rolling prairie. Soil, a good sandy loam. A few sloughs.—*A. F. Cotton*, 1883.

Sub-division.—Surface high and rolling prairie, except in the south-west, where a large alkaline flat occurs extending to the base of the Cypress Hills. Soil, generally sandy loam on clay subsoil. Class 2. There is very little water, and in the few ponds existing it is alkaline. The soil is good, but in dry seasons the pasturage is stunted. The Canadian Pacific Railway crosses the north, Cypress Station. No wood.—*G. C. Rainboth*, 1883.

- 13. Outlines.**—The south part of this township, through which the Fort Walsh trail runs, is very sandy. The remainder northwards, is high and broken. Soil, a shallow sandy loam, with clay subsoil, and very little water. The east is level and rolling prairie. The cart trail from Fort Walsh crosses the line in Section 12. A few sloughs were crossed.—*J. J. McArthur*, 1882

Along the south and west boundaries, it is generally sandy and unsuitable for farming, but fair grazing land. Water scarce and mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Rolling prairie. Soil, generally light sandy loam on sandy subsoil. Classes 3 and 4; except in Sections 9, 10, 15, 16, 21, 22, 28, 27, 33, 34 where it is a black clay loam, with black clay subsoil, and classes 1 and 2. There are small sand hills on Sections 12 and 13. The Canadian Pacific Railway crosses Nos. 1, 2, 5 and 6. The water in general is good and fresh, but there is no wood.—*F. Vincent*, 1883.

- 14. Outlines.**—Surveyed the north, south, and east boundaries. This township is high and broken, and is traversed by an alkaline valley, on the north side of which there are high hills of blown sand. This township is unfit for settlement.—*J. J. McArthur*, 1882.

West, land, in general, is sandy and not suitable for farming purposes, but will make fair grazing land; water mostly alkaline. *W. T. Thompson, 1882.*

Sub-division.—Is high and undulating. Soil, light sandy loam, with sandy subsoil, except where crossed by the Sand Hills. Water is very scarce, alkaline and bad. No wood. Township rates classes 3 and 4.—*F. Vincent, 1883.*

15. *Outlines.*—Surveyed the north, east and south boundaries. In the south part the soil is sandy, and there are some hills of blown sand. The north part is high and broken, with soil of a poor quality. The surface is rolling; there are a few marshes, but water, generally, is very scarce.—*J. J. McArthur, 1882.*

Going southward on the west boundary, the surface is hilly and broken throughout. The ridges and hill tops are stony and gravelly; the soil in the valleys between is invariably a clay or clay loam. Pasturage is fair, but fresh-water marshes are scarce. Several ponds of considerable size intersect the line, and are alkaline, dry and evaporated in summer.—*T. Fawcett, 1882.*

Sub-division.—This township is rolling prairie—with a poor soil, and generally class 3. The southern portion is all sand, and the remainder consists of clay and sand. There is a large salty swamp on Section 30, and towards the north there are several marshes scattered about. In the south it is rather dry. There is an alkaline lakelet on Sections 3 and 4.—*J. E. Sirois, 1883.*

16. *Outlines.*—North, hilly, with a clay loam, or clay soil, while hill tops and ridges are somewhat gravelly. Going southward on the west boundary, the surface is hilly and broken throughout. The ridges and hill tops are stony and gravelly; the soil in the valleys, a clay or clay loam. Pasturage is fair, but fresh-water marshes are scarce. There are several ponds of considerable size, but alkaline and dry and evaporated.—*T. Fawcett, 1882.*

Surveyed the southern and eastern boundaries, and find that throughout, the land is high and broken, with some alkaline lakes and ponds, and a soil of a poor quality. Along the east, only a small pond was crossed, and south, only two marshes in the six miles.—*J. J. McArthur, 1882.*

Sub-division.—Centrally, this township is undulating, but elsewhere it is rolling and gravelly prairie. A large salt lake, over three miles long, occurs in Sections 1, 12, 14, 11 and 23. In Sections, 17 and 20, another smaller one occurs. There are a few marshes, but water is usually scarce. The soil throughout the township is very poor, and not adapted for settlement.—*J. E. Sirois, 1883.*

17. *Outlines.*—Entering the township from the east, on the southern boundary, the country is hilly, with some small creeks in the ravines. The soil in the bottoms is generally a clay loam or a clay, but the summits of the elevations are gravelly. Going northwards, on the western boundary, the country presents a more undulating and less broken surface than the townships south of this. The soil is a friable brownish clay. There are a

few ponds or swamps in the bottoms, but the country is, as a rule, very dry, and water scarce.—*T. Fawcett*, 1882.

Dry, rolling prairie, rising to the north-west. Water scarce. Soil, sandy loam, becoming more sandy in the direction of the sand hills.—*J. Dudderidge*, 1882.

Sub-division.—The western portion is undulating, while the eastern portion contains two salt lakes, the shores of which are very elevated in Sections 12, 13 and 24. There is but little soft water in the township, and the soil, generally, is all clay. Classes 2 and 3.—*J. E. Sirois*, 1883.

- 18. Outlines**.—The north boundary is in open, gently-rolling prairie, with an excellent sandy loam soil. Class 1. In Section 35 there is a range of small gravelly hills.—*F. W. Wilkins*, 1882.

The west boundary presents a more undulating and less broken surface than the townships south. Soil, a brown clay, very dry. Marshes and water scarce.—*T. Fawcett*, 1882.

Surveyed the eastern boundary. It consists of dry, rolling prairie, with a gradual rise to the north and west. With the exception of two or three small sloughs, water was very scarce. The soil is a dry and poor sandy loam. The Swift Current trail crosses to the north-west from Section 24.—*J. Dudderidge*, 1882.

Sub-division.—Undulating prairie. Soil, generally a grey clay, and class 3. A portion of a salt lake occurs on Section 8, and another lake occurs on Sections 12, 16 and 20.—*J. E. Sirois*, 1883.

- 19. Outlines**.—The western portion of this township is rolling prairie, with a good soil, except in the south-west, where there is some sandy land.—*E. Bray*, 1882.

The east boundary is in open, gently-rolling prairie. Sections 1 and 12 have a good sandy loam soil; the others have a good clay loam. Class 1. In Section 1 a range of small gravelly hills was crossed.—*F. W. Wilkins*, 1882.

Sub-division.—Mostly a rolling prairie, except Sections 1 to 15 and 23 to 26, and portions of 22 and 27, which are inclined to be hilly. All water is fresh, and a number of good hay swamps occur in the township. Swift Current and Edmonton trail crosses the township. The soil varies from a deep clay loam in the north half and east part of the south half, to a sandy loam in the middle and west of the south half. It is a good township for settlers.—*W. R. Reilly*, 1883.

- 20. Outlines**.—Surveyed the north and west boundaries of this township, and find that it generally consists of rolling prairie, which is composed of a good soil. There appeared to be very little surface water along these lines. On the line between Sections 30 and 31 a large marsh occurs. The trail to Red Deer Forks passes just south of the northern boundary.—*E. Bray*, 1882.

The east boundary is open, rolling prairie. Sections 1, 12 and 13 have a good clay loam soil; balance, a strong clay soil. Class 1. On the whole, this is a very fair section of country. Wood and water are, however, pretty scarce; the grass on the clay soil is also very thin. Ravines, containing drainage to the Saskatchewan, cross Sections 13 and 14.—*F. W. Wilkins*, 1882.

Sub-division.—All rolling prairie, except Sections 22, 23, 24, 26 and 27, which are cut more or less by a large ravine about half a mile across, and with sloping banks, rising 60 or 70 feet. In the spring this ravine drains to Miry Creek. A large number of swamps occur; but only one large one, about 160 acres, on Section 30. These afford good hay and drainage, and contain good water. Soil, light clay loam. Class 1. A good township for settlers.—*W. R. Reilly*, 1883.

- 21.** *Outlines.*—Surveyed the south and east boundaries. The south, and the south-west, as far as Section 19, is all rolling prairie, with a fair soil. This Section is stony, hilly and broken. North of this the country is level, heavy clay land.—*E. Bray*, 1882.

East, there is a high range of hills with a great many coulees, some of which are wooded, crossing the 6th Base near this line, and extending in a north-westerly direction through the township. Soil, class 2. Miry Creek flows through the north-eastern portion in a south-easterly direction, crossing the line near the northern boundary of Section 24. This creek furnishes about the only water available in this township.—*E. J. Rainboth*, 1882.

Sub-division.—Dry, open prairie. A range of hills runs across the township, and north of these the prairie is level and dry. Southwards the surface is rolling, and has a good growth of grass. Soil, sandy loam; class 2. A creek crosses the township, but dries up as the season advances.—*J. Dudderidge*, 1883.

- 22.** *Outlines.*—The north is all open rolling prairie. Going south, from Section 36, the east boundary passes through sand hills, which are rough, broken and thickly wooded, with scrubby poplar, from 2 to 6 inches in diameter, and brush. Soil, third and fourth class. The north-east of this township reaches the right bank of the South Saskatchewan, which river furnishes about the only water available in the township, except a portion of Miry Creek, which passes through Section 6.—*E. J. Rainboth*, 1882.

West, heavy clay land, which extends to some sandy land lying on north boundary.—*E. Bray*, 1882.

Sub-division.—Rolling prairie. Soil, partly clay loam and partly sandy loam, both of considerable depth; will average class 2 all round. The western part is rolling, and the eastern contains scrubby land, lighter soil, and is covered in patches with brush. On the whole it is a fair township for settlement, and supplies of wood are obtainable near by.—*J. Dudderidge*, 1883.

- 23.**—*Outlines.*—In the west the soil is sandy from Township 24 to the South Saskatchewan River, the valley of which is near the south side of Section 30, and is two and a-half miles wide. The river, in Sections 18 and 7, is 34 chains wide, including sand bars, on which small quantities of lignite were noticed. The wood in valley is chiefly balm of Gilead, of good size, growing in groves, but the supply is rather limited. Sections 18 and 19 are on the first river plateau. Sections 30 and 31 are prairie level. Several cart trails cross here.—*T. Kains*, 1882.

All undulating prairie, and classes 1 and 2 along the east line, except Sections 1 and 12, which are broken by the Saskatchewan

River. The soil is first and second class. The river is about a mile wide at this point, including an island, which is covered with cherry, poplar and willow brush. Several cart trails cross the line.—*G. C. Rainboth*, 1883.

Along the southern boundary the surface is rolling and the soil a light sandy loam. Section 1 is broken by the Saskatchewan River.—*E. J. Rainboth*, 1883.

Sub-division.—The south Saskatchewan River passes through this township. The northern tier of sections is good, first class land, consisting of sandy and clay loams, about 6 inches deep on a clay subsoil. Between these sections and the river the soil is not so good, and the surface is very hilly and sandy approaching the river. South of the river the land is also poor. There is some brush on the banks of the river.—*E. D. Henderson*, 1883.

- 24** *Outlines*.—North and west, high, dry, undulating prairie, interspersed with a few spring sloughs. The soil, generally, is clay and clay loam, and first class, but becomes sandy towards the south and river.—*T. Kains*, 1882.

Surveyed the eastern side of this township. The surface is all undulating prairie, with a first class soil. There is very little surface water.—*G. C. Rainboth*, 1882.

Sub-division.—Undulating prairie. Soil, clay loam, 8 inches, on a clay loam subsoil of 3 feet. Class 1. Water is, however, scarce, but may be obtained from wells, and wood may be obtained from the Saskatchewan River, not far distant. Coal might also be got cheaply during navigation, as soon as transport is established.—*E. D. Henderson*, 1883.

- 25** *Outlines*.—North, undulating and rolling prairie. No water seen along the line.—*F. E. Brunelle*, 1883.

Rolling prairie, with a first class clay soil, well adapted for wheat cultivation. Water is very scarce. Wild flax is growing in abundance.—*P. Belanger*, 1883.

High, dry and undulating on the south boundary, with only a few spring sloughs. Soil, clay and clay loam. First class.—*T. Kains*, 1882.

Sub-division.—Rolling and undulating prairie, with a second class soil, composed of light clay and clay subsoil, and not good for farming land. There is neither wood or surface water in the township.—*J. Bourgeois*, 1884.

- 26** *Outlines*.—Rolling prairie, with a first class clay soil, well adapted for wheat cultivation. Water is very scarce. Wild flax grows in abundance. In the east there is a large marsh in Section 12, and two smaller ones in Section 36. From one of the latter a small creek issues.—*P. R. A. Belanger*, 1883.

Sub-division.—Surface undulating. Soil, light clay. Rates class 2, but water is scarce, and there is no wood.—*F. E. Brunelle*, 1883.

- 27** *Outlines*.—Is an undulating or rolling prairie, of a first class heavy clay soil, excellent for wheat culture. Water is scarce.—*P. R. A. Belanger*, 1883.

Rolling prairie. Soil, clay loam. Class 2. Plenty of water in marshes, and good pasture land. A large lake covers the middle of the western part of the township. Towards the north and north-west surface water becomes more scarce. The land is good for settlement.—*T. Fawcett*, 1883.

South, undulating prairie. Very little water was seen along the line.—*F. E. Brunelle*, 1883.

28. *Outlines*.—Is rolling prairie, with numerous marshes and ponds, one of which occupies part of Sections 19 and 20. The soil is a good clay loam, and ranks first and second class. A well beaten trail crosses Section 31, south-westerly and north-easterly.—*P. R. A. Belanger*, 1883.

Rolling prairie. Soil, clay loam, 12 inches deep, on clay subsoil, interspersed with boulders. Will make excellent pasture, and has abundance of water, but no wood.—*T. Fawcett*, 1883.

29. *Outlines*.—Is rolling prairie, rolling heavily to the north. Soil, sandy and clay loam. Granite and limestone boulders on the surface in Section 31. An old trail running into the Battleford trail crosses the line in Section 13.—*J. A. Maddock*, 1883.

South, undulating prairie. Soil, a good clay loam; scattered boulders; water scarce.—*T. Fawcett*, 1883.

30. *Outlines*.—Is undulating prairie. The soil is sandy loam and clay loam in about equal proportions. The only water along the line was a marsh in Section 12.—*J. A. Maddock*, 1883.

31. *Outlines*.—Is generally of a rolling character. A lake of considerable size enters near the south-west angle, having a large marsh at the east end. A small stream also enters this end of the lake. The north boundary runs along the north face of the Coteau, across Sections 34, 35 and 36. The Coteau is badly cut up by deep ravines, and is very stony. Good water is not plentiful. The soil is a clay loam on a clay subsoil, and the immediate surface is of a hummocky nature. Classes 1 to 3. There is no timber.—*F. W. Wilkins*, 1884.

32. *Outlines*.—North, rolling prairie. Soil, first and second class.—*E. Bray*, 1883.

About half of the area of this township is rolling; the other half is more or less hilly. The surface is hummocky in places. The Coteau crosses the township in a north-westerly direction, having deep ravines in its face, and, as a rule, being very stony. A number of creeks or watercourses—which were dry at the time of survey—rise in the Coteau and cross from the west to the east, draining into Eagle Creek. Good water is not plentiful, although there are some nice grass swamps. No timber exists in the township. The soil is mostly a clay loam, of a good quality, with some sand loam. Classes 1 to 3.—*F. W. Wilkins*, 1884.

33. *Outlines*.—This township is about equally divided between rolling and hilly country, and has, generally, a hummocky surface. The hilly portion lies in the west, and is still in the Coteau, but the latter is not very well defined. Several watercourses—dry at the time of this survey—cross the township in an easterly direction,

draining into Eagle Creek. Good water is not well distributed. There is no timber whatever. The soil is principally a fair clay loam, and classes 1 and 2.—*F. W. Wilkins*, 1884.

South, rolling prairie. Soil, first and second class.—*E. Bray*, 1883.

- 34. Outlines.**—The south is inclined to be hilly, but the north is more rolling. In the southern portion the surface is of a hummocky nature. The south end of Tramping Lake enters from the north, and lies in a deep, narrow valley. The water of the lake appears to be generally very shallow, and is very bad. Its outlet, Eagle Creek, flows in a south-easterly direction, in a deep valley about a mile wide. This creek is here small and muddy, and has extremely bad water. Many deep ravines open into the valley of the lake and the creek; and in some of these there are poplar and ash trees, which are suitable for firewood. The Coteau crosses this township from east to west, near the southern boundary, but it becomes very ill-defined at the west. Good water is rather scarce. The soil in the southern part is a clay loam, and at the north a sandy loam. Classes 1 to 3.—*F. W. Wilkins*, 1884.

- 35. Outlines.**—Is an open prairie, with an undulating or rolling surface, except in the south-west corner, where there is a range of hills. Tramping Lake enters near the south-east corner, where the banks are about 15 feet high, running in a westerly and northerly direction, the banks becoming higher to the north. A little wood, principally poplar, occurs in various places along the shores, chiefly on Sections 31 and 32. The water in the lake is saline. The soil, eastward, is chiefly a light or sandy loam, with some stone and gravel on the ridges. Rates second class. The north-east is high and rolling. Going south, along the western line, Section 31 is broken by Tramping Lake; then there is high land, with a clay loam soil, as far as Section 18; then a valley about a mile and a half across and about 75 feet deep, which is very stony. This valley dies out about Sections 9 and 16, or about three miles eastward of the west boundary.—*J. F. Garden*, 1883.

- 36. Outlines.**—The soil is a heavy black loam. Water good and fresh in creeks. On the southern side of Tramping Lake there is no timber.—*W. A. Ashe*, 1882.

An undulating surface, divided into east and west parts by Tramping Lake. The soil varies from sandy loam to clay loam. West of the lake there is some stony and gravelly land; east of it is all a loamy soil, classes 1 to 2, with a few clear-water ponds and several sloughs. There is some poplar near the lake, on Sections 5, 6 and 8.—*J. F. Garden*, 1883.

- 37. Outlines.**—Possesses a rolling or undulating dry surface, and is divided into east and west parts by Tramping Lake. The soil varies from loam to clay loam, with clay subsoil, and classes from 1 to 2. There is a small quantity of poplar on the east side of the lake.—*J. F. Garden*, 1883.

Southwards, the soil is a heavy black loam. There is not much surface water, except in Tramping Lake. There is no timber of consequence.—*W. A. Ashe*, 1882.

- 38. Outlines.**—Is rolling or undulating, divided by Tramping Lake into east and west parts. The soil is a clay loam on the east side, and a loam, with clay subsoil, on the west side of the lake. A sufficient supply of good water, in sloughs, was found, but the land is generally dry. A very large pond covers nearly all of Section 12. A few sloughs were crossed on the east line.—*J. F. Garden*, 1883.
- 39. Outlines.**—Is an even, or slightly undulating, dry, open prairie, with some scattered stones and low gravelly ridges. Some large sloughs were noticed in the south-west corner. Tramping Lake Valley, 80 to 100 feet deep, enters with a westerly course into Sections 7, 6 and 5; from thence it bears south. Soil, loam and clay. Classes 1 and 2. Trails were crossed in Sections 25 and 36, which connect the Red Deer Forks with Battleford.—*J. F. Garden*, 1883.
- 40. Outlines.**—The northern portion of this township possesses a good soil, and the surface is generally of a rolling character.—*G. B. Abrey*, 1883.
Is a level, or slightly undulating, dry, open prairie, with some scattered stones and low gravelly ridges. The soil varies from a heavy clay, in the east, to light or sandy loam in the west parts. Class 2.—*J. F. Garden*, 1883.
- 41. Outlines.**—Rolling and undulating prairie. With the exception of a few sections, they may all be classed 1 and 2. Soil, clay loam, 12 inches in depth, and varying to sandy loam; sand subsoil.—*H. B. Proudfoot*, 1883.
South, good; all prairie, and somewhat rolling.—*G. B. Abrey*, 1883.
- 42. Outlines.**—Rolling and undulating prairie, except a few sections. The rest may be classed 1 and 2. Soil, clay loam, 12 inches in depth, and varying to sandy loam; sand subsoil.—*H. B. Proudfoot*, 1883.
- 43. Outlines.**—This township is all prairie land. The soil is a sandy loam, and nearly all first class for settlement. The eastern side is bounded by an Indian Reserve.—*J. K. McLean*, 1883.
- 44. Outlines.**—North, hilly and rolling prairie, with scattered bluffs of poplar. Soil is a sandy loam, from 3 to 7 inches deep, resting on a sand subsoil. Class 3. Section 35 is broken by several lakes. This section is almost all solid bush, some 12-inch poplar being seen. In Section 34 are sand hills. Country all along this line is very much broken by large alkaline lakes.—*W. A. Ashe*, 1883.
West, from Section 31 to the middle of Section 18, the country is rolling, with light sandy soil, and occasional bluffs of small poplar. The balance is first-class land; sand loam soil. East, the sand hills cover Sections 36 and 25, but as soon as the hills are ascended the country becomes first class for agricultural purposes. Poplar and willow scrub, with a thick growth of weeds, pea vine, vetches, &c.—*J. K. McLean*, 1883.
- 45. Outlines.**—Going north, along the west boundary, a rolling, sandy country continues one mile and a-half to the valley of Battle

River, which river, at this place, is about 3 chains wide and 4 to 5 feet deep, with a moderate current, and sand banks from 10 to 15 feet high. The land rises slowly from the north side of the river, entering a bluff country in Section 30, and is sandy.—*J. K. McLean*, 1883.

The portion south of the Battle River is very much broken by the valley of the river and the ravines falling into the same. A small range of sand hills occurs. Soil, sandy.—*H. B. Proudfoot*, 1883.

South, rolling country, but poor soil. Land much broken by three large lakes, crossed by the line in Sections 2, 3, 4, 5 and 6.—*W. A. Ashe*, 1883.

Sub-division.—The western part is good enough for agriculture; there are also some good flats along the Battle River, but the remainder is very sandy and broken. In the northern part there is timber for small buildings, but in a very limited quantity along the Battle River. There is sufficient poplar and willows of small dimensions to serve for fencing and fuel. The alluvial soil is generally black sandy loam, from 2 to 8 inches deep, with a sandy subsoil. Good water was found almost everywhere.—*C. F. Lecterc*, 1884

- 46. Outlines.**—West, first class land, with a heavy growth of poplar and willow scrub.—*J. K. McLean*, 1883.

East, rolling prairie, with poplar and scrub. Soil is sandy loam. Cart trails were crossed in Sections 12 and 24. Line crosses the Saskatchewan River in Sections 25 and 36.—*H. B. Proudfoot*, 1883.

Sub-division.—This township has a gently-rolling surface, and most of it is thickly dotted over with bluffs of poplar or willow. The soil is alternately a black sandy or clay loam, class 1 throughout, with an average depth of from 4 to 12 inches, and corresponding subsoil of sand or clay. The country is admirably adapted to agriculture and very favorably situated for settlement. Already about a dozen settlers have located with their families in the vicinity. The North Saskatchewan River flows through Sections 35 and 36, taking in portions of 34 and 25. Its average width is something near a mile. The trail from Battleford to Pitt and Edmonton passes through this part of the township, about a couple of miles south of the river.—*J. Doupe*, 1884.

- 47. Outlines.**—Undulating land, with large bluffs of poplar and willows in the southerly portion. Soil, sandy loam. The west line crosses the Fort Pitt trail in Section 6 and the Saskatchewan River in 31. In 19 two branches of a creek were crossed. In Section 36 Turtle River was crossed twice.—*H. B. Proudfoot*, 1883.

Sub-division.—Gently-rolling land. Soil is a rich, black sandy loam, suitable for farming. The Saskatchewan River runs diagonally through the township from the north-west to near the south-east corner. The banks, which range from 250 to 300 feet high, are covered with poplar, small ash, maple, willow and dense brush. Poplar in river valley is suitable for building, being 14 to

15 inches in diameter, while that on the high lands is fit for fuel and fencing. Timber in Sections 4, 5, 8 and 9 is denser than elsewhere south of the river. Several good creeks flow into the river. No bad water was observed in the township. Battleford and Edmonton trail passes through the south-west corner.—*J. Doupe*, 1884.

- 48** *Outlines.*—North, undulating and level; soil is sandy loam, from 5 to 7 inches deep, and sand resting on a sand subsoil. Classes 2 and 3. Country is well timbered with poplar in bluffs, also some willows. In Sections 32 and 33 a large shallow lake was crossed. Turtle River was crossed in Section 36. At this place the river is 1 chain wide.—*W. A. Ashe*, 1883.

Rolling prairie. Soil is sand loam. Poplar and willow scrub. Turtle River flows generally south, almost following the east line, and crossing it in Section 25, twice in 24, once in 13, six times in 12, and five times in 6. A few sloughs were crossed along this line. In Section 6 the Saskatchewan River was crossed, in 7 and 18 a couple of creeks, and in 19 a large clear-water pond.—*H. B. Proudfoot*, 1883.

Sub-division.—The soil is generally second and third class, being all sand subsoil, covered with a soil of black sandy loam, from 5 to 8 inches deep. A very good level flat of about one mile wide lies along the Turtle River, on the east side of the township. On this flat there was growing a luxuriant crop of grass and wild oats, where willow brush did not occur. The whole surface is rolling and undulating prairie, nearly all covered with poplar, some large enough for building purposes, and willow in the north-west, which gradually becomes more scattered eastwards and southwards, until in the eastern sections, it is nearly open prairie. Water, though not very abundant, can be had by digging wells a few feet deep. Traces of damages by fire are visible everywhere.—*A. C. Talbot*, 1884.

- 49.** *Outlines.*—Viewed from the southern boundary, this township appeared undulating and level, and, so far as indicated, had a sandy loam soil, which ranks about classes 2 and 3. There are numerous bluffs of poplar, and some spruce as large as 18 inches in diameter. Turtle River courses from the north of the township, and flows south to join the Saskatchewan River, through Section 1. Here the Turtle is about 66 feet wide.—*W. A. Ashe*, 1883.

Going north, on the west, the line passes over a sandy country, rising across poplar and willow scrub to the east. Upon reaching Section 7 the country becomes first class, with bluffs of poplar averaging 6 inches in diameter.—*J. K. McLean*, 1883.

- 50]** *Outlines.*—West, the country is first class, with bluffs of poplar, averaging 6 inches in diameter. Turtle River is crossed in Section 1. Here it runs in a small valley, about 50 feet deep and 20 chains wide. The river is clear fresh-water, from 2 to 5 feet deep and 40 links wide, with numerous little falls and rapids.—*J. K. McLean*, 1883.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXI

- 9.** *Outlines.*—West, hilly and broken prairie. Soil, a good sandy loam. A branch of Swift Current Creek crosses, running north-east. It is 20 links wide and 1 foot deep; good water. There is a little bush in the gullies. The east is undulating prairie, with an occasional slough. The soil is a good dark loam. *A. F. Cotton, 1883.*

South, the surface is gently-rolling and descending. The soil is excellent; water abundant and pasturage good.—*T. Fawcett, 1882.*

Sub-division.—This township is situate on the plateau of the Cypress Hills. The surface is generally undulating, and the soil a sandy loam of good quality, and class 2. There is usually rich pasturage. The main branch of Swift Current Creek runs diagonally across the township from Section 18 to Section 33. The water in it is fresh, but elsewhere the surface water in the township is very scarce. There is no wood.—*G. C. Rainboth, 1883.*

- 10** *Outlines.*—West, rolling prairie, with numerous ponds and marshes. The soil is a very good sandy loam. In the west sections the land drops, and forms the northern escarpment of the Cypress Hills. The south half of the east boundary is rolling prairie, after which it becomes hilly, and broken by ravines and gullies. In Section 13 a branch of Swift Current Creek runs through a valley half a mile wide and 150 feet deep. The soil is a good sandy loam, but stony. There is a little bush in the valley of the creek.—*A. F. Cotton, 1883.*

Sub-division—Rolling prairie. Soil varies from a rich clay loam to sandy loam in proportions; class 1=.63; class 2=.30; and class 3=.06. Pasturage rich; surface water scarce, but a few marshes occur in the north-west. Swift Current Creek crosses the township, and contains good water. No wood in the township, but some to south-west of it. A good township for cultivation, under favorable climatic conditions.—*G. C. Rainboth, 1883.*

- 11.** *Outlines.*—Gently-rolling prairie. Soil, a good clay loam. In Section 25 the northern escarpment of the Cypress Hills rises abruptly to the height of 250 feet; then there is a table land falling gently to the south. This reaches as far as Section 12, where there is a deep gully, 200 feet deep, which reaches almost to the south boundary. A little bush occurs on the south side of the gully.—*A. F. Cotton, 1883.*

Sub-division.—The northern part is a low alkaline flat, from which rises the northern escarpment of the Cypress Hills, very much broken up and cut by ravines and coulées. Soil, sandy loam and sandy clay. Classes 2 and 3. Water is scarce and no marshes

occur; only some springs exists along the face of the hills—consequently the soil is very dry.—*G. C. Rainboth*, 1883.

- 12. Outlines.**—Along the northern boundary of the township the vegetation is better than further north, although the grass is poor. The water is nearly all alkaline, but by digging 4 or 5 feet in the soil near these ponds good water will be obtained. The Canadian Pacific Railway runs almost across the north-east corner.—*J. G. Sing*, 1882

North, land, in general, is sandy, and not suitable for farming purposes, but will make fair grazing land. A spring creek crosses Section 32, in the ravine of which there is some scrub. On the north-east corner there is a lakelet.—*W. T. Thompson*, 1882.

Surveyed the east and west boundaries. The former is gently-rolling, and the latter high-rolling. The soil all round is a good clay loam, with a number of sloughs in the west and in the north-east. The Fort Walsh and Qu'Appelle trail crosses the northern sections. There are no creeks, except one in Section 1, which is almost dry, and no trees. There is a large marsh in Section 13.—*A. F. Cotton*, 1883.

Sub-division.—High rolling prairie, except a small portion of the south-east of the township, which is an alkaline flat that extends to the foot of the Cypress Hills. Soil is all class 2, being a sandy loam on clay subsoil. Surface water is abundant and fresh, and pasturage fair. With a plentiful rainfall this is a good township for settlers. The Canadian Pacific Railway crosses the township to the north. There are a few small poplars near the north line.—*G. C. Rainboth*, 1883.

- 13. Outlines.**—West, alkaline and sandy country. The different varieties of soil at various points along the line are as follows: Sections 6 and 7, class 3—grey clay in the former, clay and sand in the latter. Section 18, class 4—very light sandy loam. The rest is chiefly class 5, and is either sandy or alkaline. The Canadian Pacific Railway crosses near the southern boundary of Section 7. A little north of this, a couple of small lakes lie opposite each other, off the line on either side. On Sections 18 and 19 is an alkaline lake. Another alkaline lake lies on Section 31. The bare sand hills have wild cherry bushes scattered over them. In the southern portion of the township the vegetation is better, although the grass is poor. The water is nearly all alkaline, but there is good water by digging 4 or 5 feet in the soil near these ponds.—*J. G. Sing*, 1882.

The south and east are generally sandy, and unsuitable for farming, but there is fair grazing, although the water is nearly all alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Rolling prairie. Soil, light sandy loam with sandy subsoil. Class 3. Sand hills occur in the north part. Sections 1, 2, 11, 10, 9, 16, 17 and 7 are crossed by the Canadian Pacific Railway. Sidewood Station is situate here. There are numbers of swamps, but all alkaline. No wood.—*F. Vincent*, 1883.

- 14. Outlines.**—North and west: Along these lines the surface is mostly rolling, with some bare sand hills in the northern part. The balance of the soil is sand, sandy loam, and in some places a light clay. The classes are 2 and 3; the sand parts being valueless, are not rated. In Section 35 the soil is a strong clay. On this section and 36 there is an alkaline lake. There are several ponds, lakes and swamps on Sections 31 and 32. There is, in general, very little grass.—*J. G. Sing*, 1882.

East, generally sandy, and poor for farming, but will make fair grazing land. Water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—High and undulating. Soil, light sandy loam or yellow sand on sandy subsoil, rates classes 3 and 4. Bare sand hills occur in large numbers. There is plenty of water, but it is nearly all alkaline. No wood.—*F. Vincent*, 1883.

- 15 Outlines.**—The surface is chiefly rolling, but there is occasionally some hilly prairie. The soil is generally a sandy loam, classes 2 and 3, except in and about Section 1, where the soil is a strong clay. There are a number of ponds of bad water scattered about. This township is, for the purposes of settlement, an improvement on Nos. 13 and 14. Some very good land is met with on the line in Section 3, which extends to the eastern limit of the township.—*J. G. Sing*, 1882.

Going southward, on the east boundary, the surface is hilly and broken throughout. The ridges and hill tops are stony and gravelly. The soil in the valleys is invariably a clay or clay loam. Pasturage is fair, but fresh-water marshes are scarce. Several ponds of considerable size intersect the line, and are alkaline, dry and evaporated.—*T. Fawcett*, 1882.

Sub-division.—The north part of the township is rolling, with a light soil, mostly sandy. The south-eastern part is broken, and the soil is sand and gravel. There is a high hill between Sections 5 and 6, surrounded by smaller hills, and all covered with boulders. No wood. A number of marshes and ponds occur, and one large, deep alkaline swamp in Sections 10, 11 and 14.—*A. F. Martin*, 1883.

- 16. Outlines.**—Going westward, on the north boundary, in the first three sections the soil is a brownish clay, varied by small drifts of sand, blown over from the sand hills. In Section 34 there is an alkaline lake, half a mile in diameter. Another, about one mile long, extends to the north of the line, at the head of which there is a spring of excellent water. Sections 33, 32 and 31 consist of pure sand hills, quite barren, and alkaline flats. Sections 35 and 36 are rolling land. Going southwards, on the eastern boundary, the surface is hilly and broken, the summits being stony and gravelly, and the bottoms clay or clay loam. There is an alkaline lake in Section 25, and several small marshes and ponds in the bottoms. These, however, soon dry up. Pasturage is fair, but water is scarce and alkaline.—*T. Fawcett*, 1882.

West, the surface is mostly rolling prairie, with occasional sand hills and coulees, the latter containing small patches of scrub or brush. Mostly third class land, with some second class

at various points. On the northern half of Section 30 it is class 4. One marsh in Section 6, and two more in Section 31. The old cart trail from Gull Lake crosses the line in Section 31. Generally, the northern part of this township is all bare sand hills, entirely destitute of vegetation. The southerly two miles are rolling prairie, covered with good grass, but the soil is very light.—*J. G. Sing*, 1882.

Sub-division.—Rolling. Soil, sandy and gravelly. Sections 28, 29, 30, 31, 32 and 34 are covered with hills of drift sand and several alkaline flats. Several trails cross here. Good water is scarce, the lakes, ponds and swamps being alkaline. A few insignificant bluffs of brush and cherry bush occur.—*A. F. Martin*, 1883.

17. *Outlines*.—Easterly portion is rolling, and sometimes hilly prairie. Sandy loam soil, with sand subsoil. Westerly portion, sand hills, and unfit for cultivation. Fresh-water ponds are very scarce, but good water may be found almost any place by digging a few feet below the surface. Large salt water lakes occur.—*H. B. Proudfoot*, 1883.

From the south-east, northward, there is a more undulating and less broken surface than the townships south. The soil is a friable brownish clay. The country is very dry and water scarce, as well as marshes. On the south base, going westward, Sections 1, 2 and 3 contain a soil of a brownish clay, varied by small drifts of sand. In Section 3 the line crosses a salt lake, half a mile in diameter. Another lake, about one mile long, extends to the north, at which place it has a spring of excellent water. The remainder of the range consists of the Great Sand Hills, barren and worthless.—*T. Fawcett*, 1882.

The southern part of this township contains many bare sand hills destitute of vegetation.—*J. G. Sing*, 1882.

Sub-division.—A belt of drifting sand runs through Sections 4, 5, 6, 7, 8, 17, 18, 19 and 30. The remainder is a sandy soil and rolling surface. Good water anywhere by digging. No wood.—*A. F. Martin*, 1883.

18. *Outlines*.—North, rolling prairie, and in places drifting sand. No water seen along the line.—*L. Bolton*.

The easterly portion is rolling, and sometimes hilly prairie. Sandy loam soil, with sand subsoil. Westerly portion, sand hills, and unfit for cultivation. Fresh-water ponds are very scarce, but good water may be found almost any place by digging a few feet below the surface.—*H. B. Proudfoot*, 1883.

East, from the base line, northward, the surface presents an undulating contour. The soil is a brownish clay. The country is very dry.—*T. Fawcett*, 1882.

Sub-division.—The north-west half of this township is drifting sand. Of this portion the north-west quarter contains many sand hills, covered, in numbers of places, with scrub and brush, and has several alkaline flats. The balance, south of the hilly part, is all level. The south-east half of the township is rolling prairie, with a light sandy loam soil. There is very little water in the township, and it is poor for settlement.—*A. F. Martin*, 1883.

- 19. Outlines.**—The easterly half, or perhaps a little more, of this township, is very good land—clay loam; clay loam soil; rolling prairie, which, in some places, might be termed hilly. The soil becomes more sandy westward, approaching the sand hills. Water is scarce. A small quantity of scrub in Sections 6, 7 and 18. The south is rolling, with some hilliness south-east.—*L. Bolton*, 1882.

East, rolling prairie, with good soil, but at and near the south-east corner some sandy land occurs.—*E. Bray*, 1882.

Sub-division.—Northerly half, rolling prairie; southerly half, hilly, with very long slopes. Soil, northwards, is a sandy loam, of 8 or 10 inches, on white clay subsoil; southwards, the soil is lighter, and especially in Sections 5, 6 and 7 it is light sand. A few of the quarter sections northwards are class 1; the rest generally class 2. The north is best adapted for settlement, grain raising and root crops. The grass on the light ground is much better than on the heavy, and as many relics of buffalo are to be seen, this must have been a favorite grazing ground. Many sloughs occur, but they dry during the summer.—*W. R. Reilly*, 1883.

- 20. Outlines.**—Going west on the northern boundary, the first four sections are arable land, and the next two are sandy, and have considerable brush. Then turning southwards, along the eastern boundary, the township consists of rolling prairie, and has a very good soil.—*E. Bray*, 1882.

The easterly two-thirds of this township is generally good, high rolling prairie, with a clay loam soil. The balance, west of this, becomes more sandy, owing to the presence of the Great Sand Hills in the ranges to the west of this township. There is some scrub on Section 6, and some more on Section 31.—*L. Bolton*, 1882.

Sub-division.—Surface varied, Sections 7 to 10 and 15 to 22 being hilly, the rest rolling prairie. In the south-west corner the soil is very sandy; but the rest of the township—except a few quarter-sections of class 1—rates class 2, being a sandy loam, of from 8 to 10 inches deep, on a light clay subsoil. Water is plentiful and fresh in the hay swamps. An alkali lake of 40 acres occurs on Section 3. Several trails cross the township, which is a fair one for settlers.—*W. R. Reilly*, 1883.

- 21. Outlines.**—The southern part of the west boundary is broken up by a range of sand hills, with a scattered growth of choke-cherry bushes. Northward, the land is rolling, or undulating, dry prairie, the soil varying from sand and sandy loam in the south, to a stiff hard clay in the central and northerly portions, with appearances of alkali. No permanent water was found. The classification of this part of the country is principally second.—*J. F. Garden*, 1882.

The cart trail from the Forks to the Red Deer River crosses the southern sections of this township, from Section 3 to the north of Section 6. Sections 1, 2 and 3, and the portions of Sections 4, 5 and 6 north of this trail, are good arable land. The portions south of the trail are very poor and sandy, having sand-hills which are covered with considerable scrub. Sections 1, 12 and 13 are

fair, rolling land. Section 24 is hilly and stony. Sections 25 and 36 are level and heavy clay land. There is a large slough on the south of Section 13, an old trail to the north of this slough, and a spring-creek north of this trail on Section 24 —*E. Bray*, 1882.

Sub-division.—North-eastwards, it is hilly, but good grazing land with a few fresh-water springs. A small part of the south-west corner is in the sand hills. The central and western portions are good rolling surfaces, and class 1, with good surface water. No wood. Generally, well adapted for settlement.—*J. Dudderidge*, 1883.

22. *Outlines.*—A range of hills running diagonally to the south-east, divides the township into two distinct prairie levels, that on the west being considerably the higher. The line north crosses the lower level, the soil being a stiff clay, with indications of alkaline. The whole is classed as 2nd. A large meadow is crossed in Sections 33 and 34, having an area of several hundreds of acres. The western boundary is all open, rolling prairie, and is entirely on the upper plateau. There are a few sloughs along the line. *J. F. Garden*, 1882.

The surface along the eastern boundary is all rolling prairie, and composed of heavy clay land. There is no surface water along the line, except in Section 1.—*E. Bray*, 1882.

Sub-division.—Hilly in the north and south; rolling prairie in the middle. Soil, generally a dark clay or a sand loam, and rates class 1. Surface water good, with springs of water among the southern hills. A large marsh on Sections 33 and 34. There is no wood. A good township.—*J. Dudderidge*, 1883.

23. *Outlines.*—West, the surface is high, and broken by deep coulees, with some wood in the bottoms, until within $1\frac{1}{2}$ miles of the township corner, where there is a large, low, level plain. This land is 3rd class, the soil being clay and gravel or sandy loam, with a quantity of scattered stones. Permanent water was found in the high land. South: soil, a stiff clay, with indications of alkali; class 2nd. A large meadow occurs in Sections 3 and 4.—*J. F. Garden*, 1882.

Soil, sandy on the east boundary, south, towards the valley of the South Saskatchewan River, which is near south side of Section 25, and is two and a-half miles wide. The river crosses in Sections 13 and 12, and is 34 chains wide, including sand bars, on which small quantities of lignite were noticed. The wood in the valley is chiefly balm of Gilead, of good size, growing in groves, but supply rather limited.—*T. Kains*, 1882.

Sub-division.—A very broken township. In the south east only is there any level, arable land. The South Saskatchewan River crosses the township diagonally from Section 31 to Section 12, and causes a broken surface, by ravines and hills for some distance inland on both its sides. Some clumps of wood, including some small groves of cherry, are to be found in several of the ravines.—*P. Burnet*, 1883.

24. *Outlines.*—Northwards and eastwards the country is high, dry and undulating prairie, interspersed with a few spring sloughs. The

soil is sandy southwards and towards the river, but elsewhere it is a clay and a clay loam, and is generally first class.—*T. Kains*, 1882.

West, the land is dry and undulating prairie, with a hard clay soil. Second class. Southward from this the land rises to a ridge about 70 feet high, which skirts the north side of the South Saskatchewan River. The stream is a quarter of a mile wide, with no sand bars, and passes through the south-west corner of the township. The valley contains some wood, and is about three-quarters of a mile wide, with good pasturage bordering the river. The surface, along the banks, is much cut up and broken by steep, deep coulees and gorges, leading into the valley, which is about 300 feet deep. The banks are of clay and gravel, with stone and boulders.—*J. F. Garden*, 1882.

Sub-division.—The Saskatchewan River crosses Section 6, flowing south-east. North-west of the river, for a couple of miles, the country is much broken and very rough, from the ravines and the valley of the river. North of this rough part the river cart trail passes, and north and west of this—or about three-quarters of the township—has a rolling surface and a good clay soil, and is well adapted for settlement. There is a little wood in the valley of the river, but none elsewhere; neither is there any surface water in the township, except in the river.—*P. Burnet*, 1883.

- 25. Outlines**.—Surveyed the west and the east boundaries of this township, and find that the surface is all undulating, and that the soil is a heavy clay one, and excellent for wheat cultivation. Wild flax was found growing in abundance. There was no water to be found in any portion.—*P. R. A. Belanger*, 1883.

Along the southern sections the land is high, dry and undulating, with a few sloughs and clay loam of a first class quality.—*T. Kains*, 1882.

Sub-division.—Undulating prairie. Soil, light clay on all-clay subsoil. Class 2. Poor for farming and grazing, as water is scarce. No wood.—*F. E. Brunelle*, 1883.

- 26. Outlines**.—Rolling or undulating prairie of a heavy clay soil, excellent for wheat cultivation. Snipe Lake is about $5\frac{1}{2}$ miles long by $\frac{1}{2}$ to $\frac{3}{4}$ of a mile wide, and greatest depth 10 feet, bordered with clay banks 40 feet high. Its water is alkaline and saline, and hardly good enough for drinking and cooking purposes; its bottom is muddy and its shores gravelly. A valley of the same width as the lake extends from its south end, in a southerly direction, as far as the 7th Base, and then turns south-east. Wild flax is growing in abundance in this township. There is a large meadow on Sections 6 and 7, and also a few smaller ones, which soon dry up, but with this exception and Snipe Lake, there is no surface water in the township.—*P. R. A. Belanger*, 1883.

Sub-division.—Similar to No. 25, but better for grazing purposes. A large lake occurs on Sections 10, 15, 22, 27, 26 and 35, extending therefrom into the next township.—*F. E. Brunelle*, 1883.

- 27. Outlines**.—Is undulating prairie, broken in its east part by the valley of Snipe Lake and its adjoining ravines. On the bottom of this valley there is a small creek, running water from the lake in

early spring and summer. Snipe Lake begins on Section 1 and runs southerly. A large marsh occupies part of Sections 4, 5, 8, 9 and 16, and furnishes abundance of good water.—*P. Belanger*, 1883.

- 28. Outlines.**—North, undulating and rolling prairie. Soil, clay loam, with scattered boulders, and stony in places; generally class 2. Eastwards, numerous small marshes occur, and in the north-west are some large marshes. No wood, except some sage bush and cactus in the west.—*T. Fawcett*, 1883.

Is partly undulating and partly rolling prairie, somewhat broken in its south-west half by a valley and its adjoining ravines, running from Snipe Lake. Numerous hay marshes and ponds are to be met with in this township. The soil ranks classes 1 and 2. The trail in Range 20 continues across this township.—*P. Belanger*, 1883.

- 29. Outlines.**—The soil is, in places, a clay loam, and in others a sandy loam. The west is undulating and level prairie, with very little water. There is a small slough in Section 6. The eastern part is rolling prairie. There are granite and limestone boulders on the surface in Section 36. There is no water to be seen along this line.—*J. A. Maddock*, 1883.

Undulating prairie on the south boundary. Soil, a good clay loam, with scattered boulders.—*T. Fawcett*, 1883.

- 30. Outlines.**—This township is undulating to the east and rolling to the west. The soil alternates between a clay loam and a sandy loam. Here is scarcely any marsh or pond water to be seen, but the north of the township is submerged by a large lake, which is supposed to be Eagle Lake. This lake appears to have the area of probably half a township.—*J. A. Maddock*, 1883.

- 31. Outlines.**—This township is entirely a prairie country, of a rolling character. Much of the southern portion of the township is submerged by a large lake, and there are several good water grass swamps in the northerly part. There is no timber whatever. The soil is principally a clay loam, and classes 1 and 2.—*F. W. Wilkins*, 1884.

- 32. Outlines.**—North, rolling prairie. Soil, first and second class.—*E. Bray*, 1883.

This township is all rolling prairie, with a good deal of rough, hummocky surface. A very small creek passes across the township to the lake in the township south of this one. Good water is plentiful. No wood. The soil is principally a clay loam, and will rate classes 1 and 2.—*F. W. Wilkins*, 1884.

- 33. Outlines.**—The surface is mostly of a rolling character, except a little hilliness along the eastern side of the township. There is a good deal of hummocky surface. No timber. Good water is plentiful. The soil, over a greater portion of the township, is a clay loam, but along the northern boundary, across Sections 31 and 32, it is very light and sandy; classes 1 to 4.—*F. W. Wilkins*, 1884.

Rolling prairie southwards. Soil, first and second class.—*E. Bray*, 1883.

- 34. Outlines.**—Is rather hilly over one-half of its area; the other half is rolling. The south-west quarter is broken into sandy knolls, and is of no value for agriculture. Soil, over the balance, is clay loam, principally. Good water is scarce. No timber of any kind. Classes from 1 to 4.—*F. W. Wilkins, 1884.*
- 35. Outlines.**—The surface of this township is undulating, or rolling, in the north-east and south-west portions, the remainder being broken by a high range of hills, running from the south-east to the north-west, and containing many ponds and sloughs, with some stones on the hills. A large coulée, from 75 to 100 feet deep, crosses the township from Section 13 to 19. This coulée contains many ponds and sloughs, a large pond of 150 acres being in 19. The soil is a sandy loam to the north of the ridge, and clay loam in the hills and to the south of them. First to second class land.—*J. F. Garden, 1883.*
- 36. Outlines.**—Northwards, the soil is a heavy black loam. Water good and fresh. Where the lakes are alkaline there are deep sloughs in profusion.—*W. A. Ashe, 1882.*
Is all an undulating, open prairie, except in the south-west corner, where there is high land. The soil varies from a clay loam, or loam, in the west, to a light loam in the easterly part. Good, permanent water was found. First to second class land. The Battleford trail passes diagonally across the north-west quarter of the township.—*J. F. Garden, 1883.*
- 37. Outlines.**—Is a gently-rolling, dry, open prairie. The soil in the western part is a clay loam, or stiff clay. In the east it is principally a sandy loam, with some stones and gravel. A small quantity of permanent water exists. Classed from first to third.—*J. F. Garden, 1883.*
- 38. Outlines.**—Is an open, undulating, dry prairie. In Section 18 a small depression or bottom land, leading into a lake lying to the west, is crossed. A large quantity of field stones and boulders was noticed in the vicinity. It is classed from 1 to 3, the soil varying from clay loam, in the west, to loam, with sandy subsoil, in the easterly parts. In some localities permanent water was seen.—*J. F. Garden, 1883.*
- 39. Outlines.**—Is even, or undulating, with some scattered stones and sloughs. The soil is principally sandy in the west, and dry clay loam in the east and south. Class first to third. The continuation of Tramping Lake Valley—80 to 100 feet deep—crosses the township from Section 12 to 30, and contains permanent water.—*J. F. Garden, 1883.*
- 40. Outlines.**—North is good; all prairie and somewhat rolling.—*G. B. Abrey, 1883.*
Is undulating, dry, open prairie; but few sloughs or stones were seen. The soil changes from a loam and clay in the north, to light sandy soil in the south, and rates from first to second class.—*J. F. Garden, 1883.*
- 41. Outlines.**—Rolling and undulating prairie. With the exception of a few sections, they may all be classed 1 and 2. Soil, clay loam,

12 inches in depth, and varying to sandy loam; sand subsoil.—*H. B. Proudfoot*, 1883.

South, all prairie, and somewhat rolling; good land.—*G. B. Abrey*.

42. *Outlines*.—Rolling and undulating, with a clay and sandy loam soil, 12 inches deep, on a sand subsoil, and, with the exception of a few sections, generally classes 1 and 2.—*H. B. Proudfoot*, 1883.

43. *Outlines*.—This township is all prairie land, the west being a little more rolling than the east. The soil is a first class sandy loam, with occasional stony spots. The township is well adapted for farming. There is very little surface water to be seen.—*J. K. McLean*, 1883.

44. *Outlines*.—In the north part it is level prairie, with scattered bluffs of poplar and willows. Soil is sandy loam, from 5 to 12 inches deep, resting on a sand and clay subsoil. Classes 1 and 2. A creek, heavily fringed with poplar and willows, flows north through the township; another, flowing south, crosses in Section 31 and joins the former. Several ponds and willow swamps were crossed.—*W. A. Ashe*, 1883.

West, rolling prairie, with occasional stony spots; first class land. East, from Section 36 to the middle of Section 13 the country is rolling, with light sandy soil, and occasional bluffs of small poplar. The balance, Sections 12 and 1 are, first class land, sand loam soil.—*J. K. McLean*, 1883.

NOTE.—A number of the north-east sections of this township are in Poundmakers' Indian Reserve.

45. *Outlines*.—West, rolling country, with occasional patches of poplar and scrub. The Battle River crosses the line on the northern half of Section 31, at the bottom of a deep ravine, the sides of which are covered with poplar. On the southern half of the same section is a marsh extending east and west for about a mile and varying in width from, say, 8 to 15 chains. There are a number of small patches of marsh at intervals along the lines. Sections 19 and 18 are hilly and broken. A running creek passed immediately north of Section 6. Soil, sandy loam, of good quality.—*H. B. Proudfoot*, 1883.

On the east boundary, Battle River is about 3 chains wide, and 4 to 5 feet deep, with a moderate current, and sand banks from 10 to 15 feet high. The land rises slowly from the north of the river, entering the bluff country in Section 25, and it is sandy across this section and 36.—*J. K. McLean*, 1883.

South-west, level prairie with poplar and willow bluffs. Soil, sandy loam. Classes 1 and 2. A creek, flowing, south crosses in Section 6. Several ponds and willow swamps.—*W. A. Ashe*, 1883.

Sub-division.—North of Battle River it is sandy, and mostly all covered with small brush, willows and poplar, varying in size from 3 to 5 inches, good for fuel and fencing only. A belt of poplar suitable for building occurs. South of the river the land is good, being black sandy loam, with sandy subsoil. Towards

the west it is open prairie, with poplar and willow bluffs. Good water can be obtained a few feet from the surface by digging.—*C. F. Leclerc*, 1884.

NOTE.—About the easterly two-thirds of this township, of that portion which is south of the Battle River, belongs to an Indian Reserve.

- 46. Outlines.**—West, rolling prairie, with poplar and willow scrub, and toward the north occasional stretches of marsh.—*H. B. Proudfoot*, 1883

East, first class land, with a heavy growth of poplar and willow scrub. Section 1 is sandy.—*J. K. McLean*, 1883.

Sub-division.—The part of the township south of the telegraph line is broken and sandy, and covered with small poplar brush and heavy underbrush—the poplar averaging from 2 to 6 inches in diameter, and fit for fencing and fuel only. The northern part is good for cultivation, except the sections adjoining the correction line, which are sandy. Soil is sandy loam, 2 to 10 inches deep, with a sandy subsoil. Good water can be obtained almost everywhere. The north part is covered with poplar and willow bluffs, fit for fencing and fuel only.—*C. F. Leclerc*, 1884.

- 47. Outlines.**—The west is all rolling prairie, with numerous lakes, a few marshes and one or two creeks. In the east the surface is undulating. The line crosses the Fort Pitt cart trail in Section 1, and the Saskatchewan River in Section 36. In Section 24 two branches of a creek cross the line. Large bluffs of poplar and willows occur throughout the township, but more particularly in the southern portion. The soil throughout is a sandy loam.—*H. B. Proudfoot*, 1883.

Sub-division.—Soil is a rich, black sandy loam, approximating, in a few places, to clay loam. Numerous fresh ponds and lakes, with clumps of poplar and willow, dot the surface. North-eastern portion is rolling prairie, while greater part of Sections 4, 5, 6, 7, 8 and 18 are covered with poplar, mostly under 9 inches diameter. Stony or Forty-Mile Creek crosses northerly part and enters the Saskatchewan in Section 36. In Section 12 trail from Battleford divides, one branch running north-west to Fort Pitt and the other running west to Edmonton. Surface is much broken by ponds.—*J. Drupe*, 1884.

- 48. Outlines.**—Rolling prairie, with numerous ponds, marshes and bluffs of poplar, willow and scrub. Soil, sandy loam. The cart trail to Fort Pitt passes near the northern limit of Section 18. In Section 1 the Saskatchewan River was crossed, in 12 and 13 a couple of creeks, and in 24 a large clear-water pond.—*H. B. Proudfoot*, 1883.

North, rolling and level prairie. Soil and subsoil, sand. Class 3. Several ponds and sloughs were crossed, and in Section 33 the Saskatchewan River. At the place where the line crosses the river it is 30 chains wide, and the west shore is heavily wooded. A creek, fresh water, 2 feet deep, crosses the line in Section 36. Poplar and willow bluffs were found all along the line—*W. A. Ashe*, 1883.

Is mostly occupied by the sand hills. Numerous ponds occur, and the surface is also much broken by coulées leading to the Saskatchewan River.—*H. B. Proudfoot*, 1883.

South, large bluffs of poplar, with occasional bluffs of spruce, 18 inches in diameter, were met with along this line.—*W. A. Ashe*, 1883.

Sub-division.—The soil of the first tier of sections along the south and east exterior lines ranks as second class, having a good black, sandy loam soil. The remainder is third and fourth class. The north-west part of the township is broken with sand hills; but the surface becomes more rolling towards the east and south, being cut along the river banks by short ravines connecting with the river valley. About two-thirds of the surface is covered with timber and brush, while wood destroyed by fire occurs in every section. The North Saskatchewan River crosses the township, and has steep banks, from 200 to 225 feet high, on the west side, but much lower and sloping on the east. The cart trail from Fort Pitt crosses the south-west corner.—*A. C. Talbot*, 1884.

49. *Outlines.*—Northwards, on the western boundary, Section 6 is sandy. Section 7 is broken by Big Gully Valley, which is about 120 feet deep and three-quarters of a mile wide. In the bottom of this gully there runs a creek to the main river. Section 18 lies in the valley of the Saskatchewan River, and the western boundary, from this section to the north-west corner, skirts along the west bank of the river. All along this part of the line it is broken and scrubby. Going north, the east line passes over a sandy country, falling to an alkaline valley to the west. Upon reaching Section 12 the country becomes first class, with bluffs of poplar averaging 6 inches in diameter.—*J. K. McLean*, 1883.

The southern part is all rolling prairie, except where it is broken by the valley of the Saskatchewan River, and by a valley which crosses north and south of Section 1. The soil is sandy. There are several ponds and sloughs, and there are numerous bluffs of poplar and willows.—*W. A. Ashe*, 1883.

Sub-division.—The North Saskatchewan River crosses the township. The soil on the west side of the river, and of a small high plateau in the centre of the township, is a light sand, without an alluvial soil, and is a third class; the remainder is composed of a good thickness of black sandy loam on a sandy subsoil, and class 2. The whole surface is rolling, and partly covered with widely scattered bluffs of young poplars and willows. Larger timber grows along the banks of the river and on the islands in the river, which are all well wooded. A number of short but deep ravines run into the river valley, most of them partly wooded with young poplar and willow. Access to the river is difficult on both sides, on account of the steepness of the banks, which vary from 150 to 225 feet in height. A small fresh-water creek, in the eastern part was not flowing at time of survey (August), but was a succession of pools. Besides this, fresh water is not abundant beyond the river; marshes and ponds are scarce, and generally alkaline. Timber destroyed by fire may be found in all

parts of the township. Big Gully Creek empties into the river in Section 7, and is about 66 feet wide at its mouth.—*A. C. Talbot*, 1884.

- 50.** *Outlines.*—West, the North Saskatchewan has a thick growth of poplar scrub on the south bank. Going north, after crossing the river, the country is first class, with a considerable amount of poplar and willow scrub. English River joins the Saskatchewan a short distance east of this meridian, and passes along the east side, crossing the line in Section 18. It is a stream of clear, fresh water, from 2 to 3 feet deep, and about 25 links wide. East, the country is first class, with bluffs of poplar averaging 6 inches in diameter. Turtle River is crossed in Section 36, and runs in a small valley, about 50 feet deep and 20 chains wide. The river is clear, fresh water, from 2 to 5 feet deep, and 40 links wide, with numerous little falls and rapids.—*J. K. McLean*, 1883.
- 51.** *Outlines.*—The surface of this township is rolling, and has a good sandy loam soil. It appears to be about half covered with bluffs of small poplars and scrub willows. The balance is prairie. Turtle River flows southwards along the eastern boundary, and the south-western corner of the township is not a great distance from the main river. There are no streams towards the interior.—*J. I. Dufresne*, 1884.
- 52.** *Outlines.*—The country is generally rolling, and there are numerous bluffs of poplar and considerable growth of willow scrub. The soil is, all round, a good sandy loam, and not inferior to the surrounding townships.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXII.

8. *Outlines.*—West, rolling and hilly prairie, with wood in places.—*E. Boivin, 1884.*

9. *Outlines.*—North, rolling and hilly prairie. A couple of creeks cross the line—one in Section 31, the other in Section 32.—*E. J. Rainboth, 1883.*

Generally hilly and high rolling prairie. In the west the soil is a good loam, but very stony. In the east the soil is a sandy loam. A small branch of Swift Current Creek crosses the south-easterly sections, flowing north-east. It is a clear stream of good water, about 1 foot deep. There is a little bush in the gullies.—*A. F. Cotton, 1883.*

Going east, on the south boundary line, the surface falls rapidly. Several deep ravines were crossed. In one, which is in Section 4, a well-defined stream flows towards the south-east. The banks of the stream are jagged, showing outcrops of limestone conglomerate. Outcrops of sandstone also occur at several points. This creek, joining the western bank of Swift Current about 40 chains south, flows north-east from its junction, and crosses the base in Section 3. Wood sufficient for building and fuel is obtainable in the ravines along the western bank of the stream.—*T. Fawcett, 1882.*

Sub-division—The northern part is a high, dry, rolling prairie, and the southern part is hilly and broken with ravines and coulees leading to Swift Current Creek, which crosses the south-east corner. The soil is a sandy loam, of various classes, 2 to 4, but would rank well as a grazing township.—*E. J. Rainboth, 1883.*

10. *Outlines.*—This township is all rolling prairie, with a sandy loam soil, which is generally very good. In the west the prairie falls rapidly to the north, and forms the northern escarpment of the Cypress Hills. In the east, owing to the inclination of the surface, there is very little water, but in the south-east there are a number of ponds and marshes. There is some scrub in the west.—*A. F. Cotton, 1883.*

Sub-division.—High, dry, rolling prairie, much broken in places with coulees. Soil varies from a sandy to clay loam, rating 3 to 4. There are patches of poplar, good for building, in the vicinity of Skull Creek, which flows northward and has good water. There are a few alkaline ponds in the south-east. Pasturage is excellent in the neighborhood of the creeks and the margins of the woods, and for grazing purposes this township is best.—*E. J. Rainboth, 1883.*

- 11. Outlines.**—This township is rolling and hilly prairie. The soil is a good clay loam, but is very stony. There are two lakes in the south half of the township, and one on Section 30. There is a moderate supply of water in the west part, but very little in the east.—*A. F. Cotton*, 1883.

Sub-division.—Rolling and hilly. Soil, sandy loam, with clay subsoil, and rated mostly class 2. Would rate class 1 but for lack of moisture in this section of the country. A gradual slope rises in the south towards the Cypress Hills. Skull Creek runs northwards through the centre of the township; the water is good. Wood, fit for fuel, grows along the banks of the creek.—*E. J. Rainboth*, 1883.

- 12. Outlines.**—The land northwards is generally of a sandy nature, and poor for cultivation. It will, however, make fair pasturage. There is both fresh and alkaline water in the vicinity.—*W. T. Thompson*, 1882.

Along the western side of the township the surface is undulating, and has a very light sandy soil, as far as the line of the Canadian Pacific Railway, in Section 30, when the soil becomes a clay. Skull Creek, flowing northwards to a lake in Section 29, crosses the boundary line thirteen times in Sections 18, 19 and 30. Towards the east the township becomes high-rolling and the soil clay loam. The Qu'Appelle and Fort Walsh trail crosses the township, bearing east and west.—*A. F. Cotton*, 1883.

Sub-division.—Rolling prairie. Soil, arid, varying from a sandy to a clay loam, but owing to the dry atmosphere of this part of the country, must be rated class 3. The Canadian Pacific Railway crosses this township, also the Qu'Appelle and Fort Walsh trail. Some of the lakes are alkaline; but the largest one is good and fresh, and lies close to the Canadian Pacific Railway. Good water is also obtainable in Skull Creek, and on its banks wood of sufficient size for fuel is abundant.—*E. J. Rainboth*, 1883.

- 13. Outlines.**—The soil is very poor, and a large part unfit for cultivation, as there are moving sand hills, from 30 to 50 feet high, which change their appearance and position with the high winds. Water is common, but generally alkaline. This township has right across it a fairly large lake,* having about $2\frac{1}{2}$ miles as its greatest width. The water of this lake is good for drinking. West, Sections 7, 18, 19, and part of 30, are bare sand hills. A large lake† was crossed in Sections 30 and 31, which submerges nearly the whole of the township adjoining west.—*A. C. Talbot*, 1882.

East, Section 1, grey clay; class 3. Section 12, clay and sand; classes 2 and 3. The Canadian Pacific Railway crosses this section. A little farther north a lake of bad water, about half a mile in length, lies, about 15 chains west of the line, mostly on Section 13. On Section 13 the line strikes an alkaline lake, which extends northwards on Section 24. The soil on Section 13 is very light, sandy loam, class 4; and on Section 24 alkaline and sandy; class 5. The balance of country north consists of sand hills and sandy

*Lake of the Narrows.

†Crane Lake.

lowland; classes 3, 4 and 5. Another alkaline lake lies on the southern half of Section 36.—*J. G. Sing*, 1882.

Generally sandy soil, which supports sufficient grass to make fair grazing land. There is a moderate supply of water, which is both fresh and alkaline, but mostly the latter.—*W. T. Thompson*, 1882.

Sub-division.—Mostly bare sandhills. The Lake of the Narrows, in the southern part of the township, contains good water, and occupies the greater portion of Sections 2, 3, 4, 9, 10 and 11. The Canadian Pacific Railway crosses Sections 1, 2, 3 and 4. There is no wood whatever.—*F. Vincent*, 1883.

- 14. Outlines**.—Surveyed the north and west boundaries. The soil, generally, is of a poor description, and a large part is unfit for cultivation. In different parts there are moving sandhills, and the south-west is all bare sandhills. Surface water is common, but is generally very alkaline. The north centre contains a large alkaline lake and the surrounding country is very much broken and hilly.—*A. C. Talbot*, 1882.

East, rolling prairie, sandy and stony. Soil, chiefly classes 2 and 3, consisting of sand, sandy loam and, in some parts, light clay. Section 36 has a large pond, and there is a lake on Section 13.—*J. G. Sing*, 1882.

Sub-division.—High and rolling, and very sandy or very light sandy loam, with sandy subsoil. Rates classes 4 and 3. Water nearly all alkaline.—*F. Vincent*, 1883.

- 15. Outlines**.—West, the soil is very poor, and a large part unfit for cultivation, as there are moving sandhills, from 30 to 50 feet high, which change their appearance and position with the high winds. Water is common, but generally very alkaline, and, at the best, bad even for animals.—*A. C. Talbot*, 1882.

East, the surface is mostly rolling or hilly prairie. Soil, sandy; principally class 2. Alkaline lake on south-east corner of Section 1.—*J. G. Sing*, 1882.

Sub-division.—Rolling prairie, of a soil of inferior quality, being very sandy. Good water is very scarce, and there is no wood. An alkaline lake occurs in Sections 3 and 4.—*A. F. Martin*, 1883.

- 16. Outlines**.—North, this township consists of pure sandhills, quite barren, with the exception of a few clumps of cherry and sage brush. Good water was obtained by digging a few feet in the bottoms between the hills.—*T. Fawcett*, 1882.

West, the soil is very poor, and a large part unfit for cultivation, as there are moving sandhills, from 30 to 50 feet high, which change their appearance and position with the high winds. These sandhills occur in Sections 7, 18 and 19. Water is common, but generally very alkaline.—*A. C. Talbot*, 1882.

Rolling prairie, sandhills and coulées, the latter containing small patches of scrub and brush; mostly third class land, with some second class. On the northern half of Section 25 it is class 4, and on the south-west half of Section 1 there is some good soil, rated classes 1 and 2. There is a marsh on Section 1, and two more

on Section 25. An old cart trail from Gull Lake crosses Section 36.—*J. G. Sing*, 1882.

Sub-division.—The greater part of this township is drifting hills of sand, unfit for cultivation. Some small bluffs of cherry occur.—*A. F. Martin*, 1883.

- 17. Outlines.**—Occupied by part of the Great Sand Hills, and perfectly unfit for cultivation. Fourth class. A few bluffs of poplar, suitable for building purposes, occur among the sand hills. Fresh-water ponds are very scarce, but good water may be found almost any place by digging a few feet below the surface.—*H. B. Proudfoot*, 1883.

South, drifting sand and sandhills, with bluffs of scrub and cherry bush. There are numbers of ponds of alkaline water, but none of fresh, which can only be obtained by digging between the hills.—*T. Fawcett*, 1882.

Sub-division.—This township lies in the locality known as the Great Sand Hills. It is all drifting sand, except Sections 36, 25 and part of 35. Some small patches of cherry and brush occur. There are also one or two islands of small poplar.—*A. F. Martin*, 1883.

- 18. Outlines.**—The northern part of this township is very sandy and rolling. There are some marshes along the eastern part of the line and some scrub to the west.—*L. Bolton*, 1882.

Occupied by part of the Great Sand Hills, and perfectly unfit for cultivation. Fourth class. A few bluffs of poplar, suitable for building purposes, exist among the sandhills. Fresh-water ponds are very scarce, but good water may be found almost any place by digging a few feet below the surface.—*H. B. Proudfoot*, 1883.

Sub-division.—This township is covered with a network of sand hills and patches of drifting sand; many places are very gravelly. There is very little surface water in the township, but it may be obtained almost anywhere by digging.—*A. F. Martin*, 1883.

- 19 Outlines.**—Surveyed the west, east and south boundaries of this township. At least two-thirds, consisting of the southern portion, lies in the sandhills, and is of little use for agricultural purposes. There is no water to be had except, by digging a few feet. The hills are covered with wild choke-cherry bushes, and in some of the valleys there are bluffs of poplar timber, some trees of which are large enough for building purposes. The north part of the township, along both east and west lines, appears to be rolling prairie, and graduates out from the pure sand of the south to a light sandy loam. On the east, north of Section 12, there is no growth of wood.—*L. Bolton*, 1882.

Sub-division.—This township lies in the chain of sandhills which stretch southwards from the Saskatchewan River, and is rough and broken. About two tiers of the northern portion are fair rolling prairie, free from brush, and may be rated class 2. This part is well adapted for root crops, but not for grain. The remainder of the township is of little use for anything, except

grazing. Small brush may be found over all the southern part. A large alkaline lake occurs in the centre of the northern third of the township, which is probably about 400 acres in extent. Surface water elsewhere is very limited, and good water can only be obtained by digging.—*W. R. Reilly*, 1883.

- 20. Outlines.**—The north of this township is all sand, which has been drifted in bare ridges and knolls. Dwarf cherry and willow brush are plentiful among these ridges.—*E. Bray*, 1882.

West and east, composed of a range of sandhills useless for agricultural purposes. Plenty of good water can be had by digging a few feet in the low places. The hills are covered with wild choke-cherry bushes. In some valleys there are bluffs of poplar timber, of which some is large enough for building purposes.—*L. Bolton*, 1882

Sub-division.—The northerly two-thirds of this township is very much broken and useless with sandhills, and is very similar, in general features, to Township 19. The two southerly tiers of sections are very similar to the two northerly tiers in Township 19, while the northerly two-thirds is similar to the southerly two-thirds of Township 19. There is good surface water in any portion of the township, but splendid water can be obtained in any part by sinking a well a few feet in any of the lower levels. The growth of brush is more plentiful in the western centre of the township than in any other portion.—*W. R. Reilly*, 1883.

- 21. Outlines.**—Surveyed west and east boundaries. The southern part is broken by a range of sand hills, with a scattered growth of choke-cherry bushes. Northward the land is rolling or undulating, dry prairie, the soil varying from sand and sandy loam, in the south, to a stiff, hard clay in the central and northerly portions, with appearance of alkali. No permanent water was found. The classification of this part of the country is principally second. The cart trail from the Forks to the Red Deer River crosses the second southerly tier of sections—*J. F. Garden*, 1882.

The southern line of this township passes along the northern ridge of the Great Sandhills, and contains many small ridges and knolls, among which there is a great deal of willow and dwarf cherry. There is no surface water, but driven wells will get it anywhere.—*E. Bray*, 1882.

Sub-division.—Rolling prairie; northwards it is good farming land; but about half a mile of the south is sandhills, which extend from the next township, No. 20. There is good surface water, and generally a good growth of grass.—*J. Dudderidge*, 1883.

- 22. Outlines.**—North, the line traverses the higher prairie level and runs parallel to the range of hills and high land lying about a mile to the north. The surface is undulating, with a soil varying from a stiff clay to a clay loam. Classes 1 and 2. Along the west line the land varies in quality from a sandy soil to a clay and clay loam, being chiefly class 2. The southern parts are high and rolling, but northwards the surface is undulating. The east is all open, rolling prairie. Sloughs are plentiful in the north, but east and west there are only a few.—*J. F. Garden*, 1882.

Sub-division.—Rolling prairie Soil, dark clay loam, deep and rich. Class 1. Surface water good and fresh and in fair supply. This is a good agricultural township.—*J. Dudderidge, 1883.*

- 23. Outlines**—West, rough and stony. The soil is sandy and gravelly. The line crosses creeks in Sections 7 and 30.—*T. R. Hewson, 1882.*

East, high and broken by deep coulées, with some wood in the bottoms, until within $1\frac{1}{2}$ miles of the township corner, where a large low, level plain occurs. This land is third class, the soil being clay and gravel or sandy loam, with a quantity of scattered stones. Permanent water was found in the high land, which crosses the township east and west along the northern boundary of the southerly tier of sections. Over this portion of the township the soil varies from a stiff clay to a clay loam, and rates from classes 2 to 1.—*J. F. Garden, 1882.*

Sub-division.—This township contains very rolling land and is rough and broken by ravines and stony knolls, with a sandy and gravelly soil, particularly in the northern portion towards the Saskatchewan River. Several creeks flow to the river, leaving the township in Sections 31, 32 and 33. There is a small quantity of scrub in Section 32. The southern portion of the township is more rolling than the north.—*P. Burnett, 1883.*

- 24. Outlines.**—The east part of the northern boundary is high, dry and undulating, and has a few spring sloughs, and a soil of clay or clay loam, which is all first class. The west half is covered with a low range of hills, of a second-class soil.—*T. Kains, 1882.*

West, rolling and hilly prairie. Very rough and stony in places. A trail was crossed in Section 19, and the Saskatchewan River in Section 6.—*T. R. Hewson, 1882.*

East, the land north-eastwards is dry and undulating prairie, with a hard clay soil. Class 2. Southward from this, the land rises to a ridge about 70 feet high, which skirts the north side of the South Saskatchewan River. This river is about a quarter of a mile wide, and passes through the southern part of the township. A little wood grows in the valley, which is about three-quarters of a mile wide, and has good pasturage. The surface along the banks is much cut up and broken by steep, deep coulées and gorges, leading into the valley, which is about 300 feet deep. The banks are of clay and gravel, with stone and boulders.—*J. F. Garden, 1882.*

Sub-division.—Much of this township is very broken by the Saskatchewan River, which runs through it in an easterly direction. The northern portion is rolling land. Soil, clay. Small groves of poplar and cherry occur along the banks of the river and larger ravines. The southern portion is very broken and rough. Creeks were crossed in Sections 4, 5 and 6. In Section 5 a little scrub was seen.—*P. Burnet, 1883.*

- 25. Outlines.**—This township is high, dry, rolling and undulating prairie. It possesses a first class clay soil, well adapted for wheat cultivation. There is very little water to be seen, excepting a few hay marshes along the vicinity of the western boundary, which are caused by the surface of the country being somewhat elevated to the east of the line.—*P. R. A. Belanger, 1883.*

Along the south, the easterly sections are high, dry and undulating, with a first class clay loam soil. The south-west portion of the township is inclined to be hilly, and the soil is not nearly so good. There is no water to be seen.—*T. Kains*, 1882.

Sub-division.—This township is well adapted for agriculture, except a portion along the south-east and the west centre, where the surface is hilly and the soil sandy and dry. The rest of the township has a surface which is level or rolling, and a first class clay loam soil. Surface water is very scarce, there being only a few marshes, which soon dry up with the advance of summer.—*S. M. Starkey*, 1883.

- 26. Outlines**.—Surveyed the west and east boundaries. The general surface is rolling or undulating, and consists of a first class clay soil, well adapted for growing wheat. Except in a few locations, there is very little water in the township. In Sections 1 and 12 there is a large hay marsh, and on the south-east of Section 13 a smaller one. Section 18 is somewhat hilly, and to the north of this there is a lake which stretches from this section into 19, on the west of which there is some marsh land.—*P. R. A. Belanger*, 1883.

Sub-division.—Level prairie. Soil, clay loam. Class 1. Well adapted for settlement. Surface water is, however, scarce. No wood.—*S. M. Starkey*, 1883.

- 27. Outlines**.—High, dry and undulating prairie, with a first class clay soil. No water could be found at the time of the survey; but as there are many dried marshes, there must be a considerable amount of surface water in the spring. There are, however, lakes in the townships both east and west of this one, and these are not far from the boundary lines.—*P. R. A. Belanger*, 1883.

- 28. Outlines**.—Along the northern sections the surface is generally rolling and undulating, and the soil is of clay loam, and class 2. In the soil there are embedded scattered boulders, and there are also a few marshes to be seen. Some sage bush and cactus are growing on Sections 35 and 26. On the whole, this portion of the township appears to be fair farming land, but there is no wood.—*T. Fawcett*, 1883.

Is rolling and undulating prairie, somewhat broken in its north half by a creek valley of about 30 to 40 feet deep, and its adjacent ravines. The soil consists of clay and clay loam, and ranks first and second class. A trail from the Red Deer Forks crosses the township from Section 6 to 13.—*P. Belanger*, 1883.

- 29. Outlines**.—Is rolling prairie to the south, and undulating prairie to the north-east. The soil is a good clay loam, with sandy loam in places. Very little water was seen. A small slough was crossed in Section 1.—*J. A. Maddock*, 1883.

South, undulating prairie. Soil, good clay loam, with scattered boulders. In places the soil is alkaline.—*T. Fawcett*, 1883.

- 30. Outlines**.—Is rolling prairie. The soil is sandy loam with clay loam in parts, and parts very stony. Water is scarce, only one marsh being crossed. There is a large lake within a couple of miles of the eastern boundary.—*J. A. Maddock*, 1883.

- 31. Outlines.**—This township is all rolling prairie, with a hummocky surface. Good water is plentiful in the northern portion. There is no wood of any kind. The soil is generally a clay and a clay loam, and class 2.—*F. W. Wilkins*, 1884.
- 32. Outlines.**—North, soil first and second class. Rolling prairie. In Sections 32 and 31 the line crosses the north end of a lake of considerable size.—*E. Bray*, 1888.
Is all rolling prairie, with hummocky surface in the southern part. Some stony land occurs at the extreme north. A fair sized lake exists in the north-west angle. Good water is everywhere in abundance. No timber of any kind exists. The soil is principally clay loam and clay. Classes 1 to 3.—*F. W. Wilkins*, 1884.
- 33. Outlines.**—Is all rolling prairie. The western part is considerably more elevated than the eastern. Good water is plentiful, but there is no timber of any kind. Soil, principally clay loam, with some light sand loam in the north-east. Classes 1 to 3.—*F. W. Wilkins*, 1884.
The southern part of the township, as it appeared from the boundary line, consisted of rolling prairie, with a clay loam soil, which rated first and second class. A large lake breaks on Sections 5 and 6, and stretches far to the south in the southern township.—*E. Bray*, 1883.
- 34. Outlines.**—This township is principally rolling prairie, broken in the south-west by sandy knolls. Good water is scarce, and there is no timber, except a few poplar and cherry bushes on the sand knolls. The soil in the west portion is clay and clay loam, and in the east sand and sand loam. The classes of soils range from 1 to 4.—*F. W. Wilkins*, 1884.
- Outlines.**—This township is considerably broken by coulées and hills, ponds and sloughs. A great many stones were found bordering on or in the coulées. The extreme southern part of the township is not so much broken. The soil changes from a loam, with clay subsoil, to sandy loam, and is second class throughout.—*J. F. Garden*, 1883.
- 36. Outlines.**—North, prairie, hilly in Section 33. The alluvial soil is about 6 inches deep, on a clay subsoil. Class 2. Marshes were crossed in Sections 31, 34 and 36.—*W. Ashe*, 1882.
Has an even, undulating surface in the easterly and north-westerly parts, with a clay loam soil. Classes 1 to 2. The south and south-westerly portions are much higher and rolling, with long, easy slopes, the hollows containing a good deal of water. The soil is a clay loam, and may be fairly considered as first-class. The Battleford trail crosses the south-east corner, and from here branches the old cart trail to Edmonton.—*J. F. Garden*, 1883.
- 37. Outlines.**—The easterly part is even, or gently-undulating, dry, open prairie, with clay loam, and is class 1. The westerly part is high and broken in some places by hills and ponds, the soil being clay loam, with scattered stones. Class 2. This hilly land is the eastern limit of the Ear Hills. A small lake is situated in the north-west corner of the township. To the west of this lake the

soil is alkaline. Places in the hilly part are also alkaline. A valley crosses Section 6, bearing north-west, and in this a large hay marsh occurs.—*J. F. Garden, 1883.*

- 38. Outlines.**—The easterly side of this township is undulating, or rolling surface, with clay loam or stiff clay soil. Classes 1 and 2. The westerly part is broken by the Ear Hills, which contain many ponds or lakelets in the hollows. The soil in some places appears to contain alkali. Stony and gravelly ridges were also met with. In the north end of the township is a small lake, six miles east and west, by about three miles north and south. The water in it is muddy, with a bad taste. The water in the sloughs and ponds, however, is exceptionally good. On the south side of the lake is an even plain of about two sections in area.—*J. F. Garden, 1883.*
- 39. Outlines.**—Is rolling and undulating, except near the north-west corner, where the surface is broken. A coulée, 120 feet deep, runs north along the western boundary, and contains large quantities of stones and alkali on the sides and bottom. The western boundary continues broken and hilly to the south of the township. The south end is also broken by a lake. The soil is clay or sandy loam in the west, and is graded, generally, from second to third class. The greater portion of the two southerly tiers of sections is submerged by a large muddy lake, the water of which is very bad. Sections 1 and 12, and the north shore of this lake, consist of clay loam. North of this, the eastern portion of the township is even or undulating and contains many low sandhills. The classes of soil in the east range from 2 to 4.—*J. F. Garden, 1883.*
- 40. Outlines.**—The north is good—all prairie, and somewhat rolling.—*G. B. Abrey, 1883.*
Is an undulating or rolling, dry, open prairie. Soil, loam or sandy loam. A small lake extends into the north-west corner, covering Sections 30 and 31, and part of 29 and 32, and contains weeds and poor water. Good water, however, was found in sloughs. The soil classes from second to third in the west, and is there a sandy loam soil. In the east it is a loam and sandy loam, in some cases mixed with gravel and some stones, and class 2.—*J. F. Garden, 1883.*
- 41. Outlines.**—This township is all rolling and undulating prairie. With the exception of a few sections, the township may all be classed 1 and 2. The soil is a clay loam, about 12 inches deep, and is generally a sandy loam on a loam subsoil. The cart trail to Battleford crosses from Section 7 to 25. Several small creeks cross the southern half of the eastern boundary, flowing westwards.—*H. B. Proudfoot, 1883.*
Southward, good prairie, and somewhat rolling.—*G. B. Abrey 1882.*
- 42. Outlines.**—Generally rolling and undulating prairie. It may be classed 1 and 2. Soil, clay loam, varying to sandy loam, 12 inches in depth, on a sand subsoil. A considerable portion is very rough and broken by a series of small sandy ridges, which are chiefly covered with a growth of small poplar and scrub. The north-west

corner is rough and hilly prairie and there are several lakelets in this part of the township. Two creeks cross the south-east, flowing north-east; otherwise, surface water is scarce.—*H. B. Proudfoot*, 1888.

43. Outlines.—This township is all rolling prairie. There are occasional stony and gravelly places, but all the rest is first class land. There are a few ponds scattered about.—*J. K. McLean*, 1883.

44. Outlines.—Surveyed the north boundaries of Sections 35 and 36. These sections are rolling, with scattered clumps of poplars and willows. The soil is a black loam, from 8 to 12 inches deep, on a clay subsoil, and generally class 1. There are several ponds to be seen.—*W. A. Ashe*, 1883.

This township is all rolling prairie, and consists of soil of the best quality, except where there are some stony and gravelly spots. Some creeks take their rise in the eastern part and flow north-eastwards to the Battle River.—*J. K. McLean*, 1883.

45. Outlines.—This township is more or less broken in the northern portion by the ravines running into the valley of Battle River, and by the valley of the river itself. The soil is generally a sandy loam, changing often to a clay loam. The approximate area of scrub growth reaches from the river to a line between Sections 1 to 19.—*H. B. Proudfoot*, 1883.

Sub-division.—Is rolling and broken, being almost covered with an overgrowth of poplar and willow, averaging in size from 2 to 3 inches in diameter, fit for fuel and fencing only. Soil is black loam, from 3 to 8 inches deep, with a sandy subsoil. Good land for agricultural purposes. Water is scarce, but can be obtained a few feet from the surface, by digging.—*C. F. Leclerc*, 1884.

46. Outlines.—Surveyed the east and the west boundaries of this township. The soil is generally a light, sandy loam, thickly covered with a growth of small poplar and scrub. The Battle River crosses and breaks up the southern tier of sections. It enters the township on Section 6 and flows westwards. There is a large lake of several miles in length, which crosses the western boundary in Section 18, and in the north-eastern part of the township there are a number of marshes and ponds.—*H. B. Proudfoot*, 1883.

Sub-division.—Is broken and sandy, chiefly covered with small poplar and heavy underbrush, averaging in size from 2 to 8 inches in diameter, fit for fencing and fuel. A small quantity may be serviceable for building. The water is generally good, and is obtainable in small swamps and springs. The alluvial soil is generally sandy loam, from 2 to 5 inches deep, with a sandy subsoil. The only good land is in the Maskawa Mountain and along the river. The remainder is not adapted to agriculture. Maskawa Mountain, in the south-east corner, is covered with heavy poplar, averaging from 2 to 5 inches in diameter. A few are fit for building, but the majority for fuel and fencing only.—*C. F. Leclerc*, 1884.

47. Outlines.—Rolling and undulating prairie, with poplar and willows in large bluffs. In the eastern portion there are a number of

large lakes and ponds, and over the township, generally, willow and grass swamps are plentiful. The general inclination or run of the water is eastwards to the Saskatchewan. The Edmonton cart trail and the telegraph line cross the southern part of the township.—*H. B. Proudfoot*, 1883.

Sub-division.—Consists, generally, of a light, sandy soil, but in places is deep, rich and black. Surface is rolling; sandhills in places. Lakes and ponds are numerous; water mostly fresh and good. Small poplar brush and willows are dotted over the surface. Battleford and Edmonton trail, and the old Canadian Pacific Railway telegraph line, cross the southern end of the township.—*J. Doupe*, 1884.

48. *Outlines*.—North, level prairie, with numerous poplar bluffs. Soil, sandy loam, and sand and gravel, with a sand subsoil. Classes 2 and 3. Trail to Fort Pitt was crossed in Section 32. In Section 36 a creek, 10 feet wide, 6 inches deep, crosses the line, flowing between banks 60 and 80 feet in height. The water is excellent. Several lakes, sloughs and muskegs were seen along the line.—*W. A. Ashe*, 1883.

The Fort Pitt trail diagonally crosses the north-east quarter of the township. North of this, the surface contains quite a number of sandhills, and is not very suitable for settlement. The remainder of the township is mostly rolling and undulating, with poplar and willows in large bluffs. Surface water appears scarce north-eastwards. There are a few small creeks crossing the western boundary and flowing east. Willow and grass swamps are plentiful in the west.—*H. B. Proudfoot*, 1883.

Sub-division.—Is poor as agricultural land, being a light sand, mostly covered, in some places, with a growth of stunted poplar, except in the west, where timber, suitable for building and fencing purposes may be obtained. A ridge of small sandhills—one to two miles broad—lies across the north, on both sides of the Battleford and Fort Pitt trail. There are numerous marshes and swamps—some of them miles long—where there is good grass, and if drained, would make excellent hay land. The water in these is usually good and fresh, but in the lakes it is alkaline, and not drinkable. There are remains of timber and brush, partly destroyed by fire, all over the township.—*A. C. Talbot*, 1884.

49. *Outlines*.—West, a growth of poplar and willow scrub covers the country through Section 6, and partially through 7, where a hill about 60 feet high occurs, with a thick growth of poplar scrub on the northerly slope. On the other side of the hill the country is slightly rolling prairie, and first class, until Section 30, where poplar bluffs exist. The land continues first class. Big Gully Creek is crossed in Section 24, the banks not being more than 20 feet high. East, Section 1 is sandy, and second class. Big Gully Creek, which runs in a valley about 120 feet deep and three-quarters of a mile wide, crosses Section 12. In Section 13 the meridian descends the valley of the North Saskatchewan River, and whole line from here northwards lies along the broken valley of the river.—*J. K. McLean*, 1883.

The southern portion of this township has a poor sandy loam, and sometimes sand and gravel soil, and generally class 3. A fine creek, having excellent water, crosses Section 1, and flows northwards to Big Gully Creek, which, in its turn, flows to the Saskatchewan River. There were several sloughs and muskegs along the line.—*W. A. Ashe*, 1883.

Sub-division.—The south-west part—Sections 3, 4, 5 and 6, and the south part of Sections 7, 8 and 9—is nearly all a swampy bottom, broken in many places with small ponds of alkaline water and bunches of poplar, willow and sage brush. The remainder is generally high and dry, and covered with bluffs of young poplar to about one-fifth of its area. Big Gully Creek flows eastwards from the north of Section 18 to the south of Section 12. The water in this creek is very good; the gully in which it flows is from 60 to 80 feet deep, and has very steep banks. The soil of the township is all sand, with very little alluvial soil, and is third class, except a small plateau on Sections 34, 35 and 36, which ranks as second class, having a bed of sandy loam, 5 or 6 inches deep, on a clay subsoil. The trail from Battleford to Fort Pitt runs across Sections 5, 6 and 7. Good water is scarce. North of Big Gully Creek the water of the marshes is nearly all alkaline. There is a sufficient quantity of timber for building and fencing purposes. Traces of damage by fire exist in every section of the township.—*A. C. Talbot*, 1884.

50. Outlines.—First class soil. There is a considerable amount of poplar scattered over the country which will average 6 to 8 inches in diameter. The Saskatchewan River crosses the township from Section 19 to the south-east corner, giving the usual features to the country on both sides of the river. English River flows from the north, across the north-east quarter of the township, and leaves it in Section 13. It is a stream of clear, fresh water, from 2 to 3 feet deep and about 25 links wide. Section 6 is sandy, and covered with small poplar.—*J. K. McLean*, 1883.

51. Outlines.—Slightly rolling country, of a rich, sandy loam soil. One half of this township is wooded with bluffs of poplars 1 to 5 inches in diameter, and considerable willow scrub. The south-west corner falls in the Saskatchewan River. Sections 5 and 6—due to the vicinity of the river—are thickly wooded with poplar, averaging 8 inches in diameter. In the interior of township is a lake about $2\frac{1}{2}$ square miles in area.—*J. I. Dufresne*, 1884.

52. Outlines.—Gently-rolling country. The northern, western and eastern portions of the township are rolling prairie, covered with bluffs of poplar, together with willow scrub. The central part is nearly all open prairie. On Sections 18 and 19, the easterly shore of a large lake, which extends into the adjoining township, is crossed. There is a creek* crossing the line on Section 33, which is about 40 links wide, and which flows southwards. On either side of this creek there is a belt of rich, black loam soil. The soil elsewhere alternates between a sandy and a black loam, and varies from first to second class.—*J. I. Dufresne*, 1884.

* The source of English River.

- 53. Outlines.**—Appears to be rolling country of sandy loam soil. Bluffs of willows and poplar are scanty on the south part, but wood of larger growth and in rather thicker bluffs are seen further north. Several quagmires and morasses are distributed through this township. The soil is of good quality, varying from $1\frac{1}{2}$ to 2nd rate.—*J. I. Dufresne, 1884.*

Sub-division.—The South Saskatchewan crosses from Sections 18 to 36, and the country, for an average distance of a mile on each side of the river, is much broken by deep ravines. Cottonwood, grows along the banks of the river, and small groves of cherry. &c., in the ravines. Back from the river, on either side, the country is rolling prairie. Soil, clay and clay loam. Classes 3 and 2. Nearer the river it is sandy.—*P. Burnet, 1883.*

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXIII.

8. *Outlines.*—The general surface of the north of this township is undulating, and the soil is a clay loam, of a depth varying from 1 to 8 inches, on a stony and gravelly subsoil. There are several deep ravines on the eastern end of the line, with some very small creeks in them. Towards the west, Section 31 is low, and contains a lumpy marsh, along the eastern side of which there is an old cart trail.—*T. Fawcett*, 1882.

Sub-division.—The surface is hilly and heavy-rolling prairie, stony in places. The alluvial soil consists of black, sandy and gravelly loams, 3 to 6 inches deep, on sandy, clay and gravelly subsoils, and not well adapted for cultivation, except in the lower levels, where there is good bottom land, having fine grass. The only wood is some brush in Sections 31, 32, 29, 20, 19 and 30. Water is very scarce, and generally the township is not eligible for settlement. In the west, creeks were crossed in Sections 7, 18 and 30.—*E. Boivin*, 1884.

9. *Outlines.*—Going west, on the northern line, the first two miles are rolling prairie. Here a creek* was crossed, after which, as far as the western limit of the township, the surface consists of hilly prairie, covered with brush and small trees in Sections 31, 33 and 34. A branch creek was crossed in Section 31.—*E. J. Rainboth*, 1883.

The southern portion of the western boundary consists of high rolling prairie, having a good loam soil, but somewhat gravelly. North of this, the township is hilly, sloping to the north, and covered with a dense growth of small poplar and willow. In this timbered portion a creek flows northwards to Crane Lake. The eastern portion of the township is hilly and high rolling, with a good loam soil, but very stony. The south-west corner of Section 6 is marshy, and north of this marsh there passes a cart trail.—*A. F. Cotton*, 1883.

South, the surface is undulating. Soil, clay loam, from 1 to 8 inches in depth subsoil stony and gravelly. In Section 1 there are several deep ravines and dry coulees trending to the south-east.—*T. Fawcett*, 1882.

Sub-division.—All in the Cypress Hills plateau; hilly and with many gullies northwards, but more level southwards, and thickly grown with poplar bush. A creek† crosses the north-west corner, and is joined in Section 30 by two branches, one from the south and the other from the south-east. Another stream,† about 10 feet wide, crosses Sections 15, 22, 23,

* Named Pie-a-Pot in the maps.

† Both Pie-a-Pot Creek.

26, 35, and 34. Soil, generally gravelly, but good grass in many of the gullies and low places.—*W. Chipman*, 1883.

- 10. Outlines.**—The south half of the west boundary is hilly and broken prairie, the soil of which is a light sandy loam, and stony. The north half is rolling prairie, the soil being a little better than the south half, but very stony in a great many places. The east is rolling prairie, falling rapidly to the north. The soil is a fair loam.—*A. F. Cotton*, 1883.

Sub-division.—High, dry, rolling and hilly, broken by coulees leading to the Pie-a-Pot Creek, of which there are two branches running through the township, and along which there is a belt of scrub poplar, good for fuel and fencing. Water is good in the creeks. Soil, dry, sandy loam. Class 3. Pasturage poor. The great drawback to the Cypress Hills country is the dryness of the seasons.—*E. J. Rainboth*, 1883.

- 11. Outlines.**—This township is, for the most part, rolling prairie, but somewhat inclined to be hilly in the east centre. In the west the soil is very sandy and poor, but eastwards there is good clay loam, which is, however, in many places, very stony. Two lakes were crossed on the eastern boundary, and a branch of Pie-a-pot Creek crosses the western boundary several times on Section 19. Fort Walsh and Qu'Appelle trail also crosses the line in this section.—*A. F. Cotton*, 1883.

Sub-division.—Northwards, a dry, rolling prairie; southwards, hilly and broken. Soil, sandy loam. Rates classes 2 and 3—would rate No. 1 but for its aridness. Pie-a-Pot Creek runs northwards through the township, and has scrubby poplar on its banks in the south portion of the township. The Fort Walsh and Qu'Appelle trail leads from Section 35 to Section 32.—*E. J. Rainboth*, 1883.

- 12. Outlines.**—North, land in general is sandy, and not suitable for farming purposes, but will make fair grazing land. Water mostly alkaline. The southern end of Crane Lake was crossed in Section 31, and again a larger portion of it in 33 and 34.—*W. T. Thompson*, 1882.

The north half of the west boundary is almost level prairie, the soil being a stiff clay. Pie-a-Pot Creek runs through this township, and has a narrow fringe of maple along its banks. The south half is hilly and stony. The soil is a good loam. East, an undulating prairie, with a very light sandy soil, which continues until the Canadian Pacific Railway is crossed, when it becomes a clay. A small creek crosses this line thirteen times in a mile and a-half.—*A. F. Cotton*, 1883.

Sub-division.—Dry, rolling prairie. Soil, light sandy loam; rates classes 2 to 4. The Canadian Pacific Railway runs diagonally across the township. Crane Lake extends into the township, and there is also another lake south of the Canadian Pacific Railway track. Both lakes are alkaline, and the only fresh water obtainable is from Pie-a-Pot Creek, emptying into Crane Lake. Grass is stunted and short. Crane Lake Station, on the Canadian Pacific Railway, is situate here. The Fort Walsh and Qu'Appelle trail crosses Section 1.—*E. J. Rainboth*, 1883.

- 13. Outlines.**—The western boundary of this township crosses several arms of Crane Lake—three small ones, two of which are in Section 6, and a large one in Sections 18 and 19. The lake appears to cover about two-thirds of the township. The land lying north and west of the lake is a fair sandy loam, and the surface is generally rolling prairie. The water of the lake is very good, but there is none to be had elsewhere.—*J. G. Sing*, 1882.

The soil eastwards is very poor, and a large part unfit for cultivation, as there are moving sandhills from 30 to 50 feet high, which change their appearance and position with the high winds. This is worse on Sections 12, 13, 24 and 25, which are bare sandhills. A large lake* was crossed in Sections 25 and 36.—*A. C. Talbot*, 1882.

Almost all of the southern portion of the township lies in a large lake, excepting Sections 1 and 2, the soil of which is sandy and unsuitable for farming, although there is some fair grass.—*W. T. Thompson*, 1882.

Sub-division.—Crane Lake—fresh water—covers the greater portion of this township. The few sections north and east of the lake are bare sandhills.—*F. Vincent*, 1883.

- 14. Outlines.**—Surveyed the north and west. The surface is very sandy and poor. In a number of places there are drifting sandhills, which render a considerable portion of the township unfit for cultivation. There are some small marshes scattered about, but a good deal of the water in the township is alkaline, and the best of it is bad, even for animals.—*A. C. Talbot*, 1882.

The whole line along the west lies in a sandy country, and generally rolling prairie. Section 6 is class 3; 7 and 18 are class 2, and 19, 30 and 31 are class 4. In Section 13 there is a lakelet of bad water, and there is more to be seen a few chains to the north-west of this. Fresh water is very scarce.—*J. G. Sing*, 1882.

Sub-division.—This township is all rolling and sandy prairie, with numbers of bare sandhills in places. There are a few scattered marshes in the north-west quarter of the township, but good water is very scarce, and there is no wood whatever.—*F. Vincent*, 1883.

- 15. Outlines.**—West, south and east, the soil is poor, and a large part drifting sandhills. Water very alkaline.—*A. C. Talbot*, 1882.

Sub-division.—A belt of drifting sand runs through Sections 2, 3, 4, 5 and 6. The rest of the township is highly rolling, with a soil of almost pure sand. The north is very sandy, hilly and rough prairie. Drifting sand. No water.—*A. F. Martin*, 1883.

- 16. Outlines.**—North, the soil is sandy, but the surface becomes more grassy than the more southern townships and assumes a fair vegetation. Sections 36, 35 and 34 are mostly flat, but the surface is very lumpy. In Section 33 the line is intersected by a lake extending west a mile and a-half and north three-quarters of a mile. West of the lake the surface is ascending, and becomes hilly.—*T. Fawcett*, 1882.

*Crane Lake.

This township is rolling, hilly and rough. On the west side, south of Section 19, the surface is bare sand, and the same is the case with the east side south of Section 25, except Section 1. The north portion of the township is a light, sandy loam, which has a fair crop of grass. Water, generally, is very scarce, and what there is, is alkaline.—*A. C. Talbot, 1882.*

Sub-division.—From Section 27, southwards, there are hills of drift sand. The rest of the township is very sandy, rough and lumpy. A few poplars occur here and there, and some brush. There are some alkaline ponds and marshes in the central portion of the township.—*A. F. Martin, 1883.*

- 17. Outlines.**—Occupied by part of the Great Sandhills, and is perfectly unfit for cultivation. Rate, fourth class. There are a few bluffs of poplar—suitable for building purposes—among the sandhills. Fresh-water ponds are very scarce, but good water may be found almost any place by digging a few feet below the surface. A large salt water lake occurs in the south-west.—*H. B. Proudfoot, 1883.*

The soil of the southern sections is sandy, but possesses a fair vegetation. Sections 1, 2 and 3 have a lumpy surface. Section 3 contains a marshy pond, which is slightly alkaline, and several marshes. A lake, about a couple of miles long, extends over Sections 4 and 5. West of this lake the surface becomes hilly and ascending.—*T. Fawcett, 1882.*

Sub-division.—The northern part, beyond Section 10, is drifting sand; the remainder is rolling prairie, with a very light soil. No wood of consequence, except scrub. Fresh water is obtainable anywhere by digging for it. Free Fight Lake covers parts of Sections 4 and 5. It is very salt, and has remarkably clear water, with fine sandy beaches and bottom.—*A. F. Martin, 1883.*

- 18. Outlines**—North, hilly prairie, with patches of blowing and drifting sand. Some of the sandhills attain a height of 200 feet, and are scattered over with numerous patches of brush. No water was seen along this line.—*L. Bolton, 1882.*

This township is occupied by part of the Great Sandhills, and unfit for cultivation. Rate, fourth class. A few bluffs of poplar, suitable for building purposes, are to be found among the sandhills. Fresh water very scarce, but may be found any place by digging a few feet below the surface.—*H. B. Proudfoot, 1883.*

Sub-division.—Is wholly unfit for cultivation, being a complete network of sandhills—some 200 feet high. There is considerable cherry wood between the hills. Water may be obtained by digging a few feet anywhere.—*A. F. Martin, 1883.*

- 19. Outlines.**—West, rough and broken prairie, in places very sandy. Timber was found in Sections 6, 30 and 31.—*H. B. Proudfoot, 1882.*

South and east is composed of sand hills, and will be of little use for agricultural purposes. Plenty of good water can be had by digging a few feet in the low places. The hills are covered with wild choke-cherry bushes. In some valleys there are bluffs of

poplar timber, some trees large enough for building purposes.—*L. Bolton*, 1882.

Sub-division.—Large portions of Sections 18, 19, 30, 31, 34, 35, 36 and 25 are open, rolling prairie, with a sandy loam soil. The remainder of the township is extremely rough, and broken by a chain of sandhills extending southerly from the Saskatchewan River, and is more or less covered with clumps of poplar, cherry, willow and birch, much destroyed by fire. Although considerable drifting sand exists, the hills and hollows sustain a splendid growth of grass. There is little surface water, but abundance at a few feet below the surface.—*W. R. Reilly*, 1883.

- 20. Outlines**.—North, first two sections are very sandy, but going west the soil improves in quality. There are a few bluffs of very scrubby poplar among the sandhills.—*E. Bray*, 1882.

The east is in the range of sandhills running southerly from the south branch of the Saskatchewan River towards the Cypress Hills. Of little use for agriculture. Plenty of good water can be had by digging a few feet. The hills are covered with wild choke-cherry bushes. There are bluffs of poplar timber, in which some trees are large enough for building purposes.—*L. Bolton*, 1882.

Going northwards, on the western boundary, Sections 6 and 7 are in a perfect sandy desert and plain, with a little scrub in Section 6. North of this there are sandhills, with some scrub, in Sections 30 and 31. None of this portion of the township is fit for farming.—*H. B. Proudfoot*, 1882.

Sub-division.—This township may be described similarly to No. 19 of this range, the same surface features occurring. The rolling portion embraces Sections 9, 10, 15, 16, 21, 20, 19 and 30. Fair sandy loam soil. Class 2. Like No. 19, it has excellent grass, shelter and firewood, and abundance of water—by sinking a few feet—and will do well for grazing. South, the only water is a small lake in Section 2.—*W. R. Reilly*, 1883.

- 21. Outlines**.—This township is undulating prairie, with heavy clay soil, well adapted to farming. Trail crosses the line in Section 30. *T. R. Hewson*, 1882.

The southern part of the east boundary of this township is of poor quality, owing to the low sand ridges, with some cherry bushes, crossing them. The southern parts are high and rolling, but northward the surface becomes rolling or undulating.—*J. F. Garden*, 1882.

South, Sections 1 and 2 are very sandy, but going west the soil improves in quality.—*E. Bray*, 1882.

Sub-division.—Rolling prairie, well adapted for agriculture, plenty of good surface water. Soil, generally, clay loam, and some sand loam. No wood; but plenty 15 miles off.—*J. Dudderidge*, 1883.

- 22. Outlines**.—North and West, an open, rolling country. A trail was crossed in Section 19 and a small lake in 31. The soil is heavy clay, and the land well adapted to farming.—*T. R. Hewson*, 1883.

East, going north, the land improves in quality from a sandy soil to a clay and clay loam, being chiefly second class. The southern

parts are high and rolling, but northward the surface becomes rolling or undulating.—*J. F. Garden*, 1882.

Sub-division.—Rolling. Plenty of good surface water. Soil, clay loam. Class 1. No wood. A good agricultural township.—*J. Dudderidge*, 1883.

- 23. Outlines**.—Consists mostly of undulating prairie. The South Saskatchewan flows along the north boundary for a short distance, near the north-west corner. In this vicinity the township is much broken by deep coulees running in all directions and extending back into the prairie for a distance of about two miles. There is no timber, except along the bank of the river. The land is well suited for farming. The soil is heavy clay. Westwards, Sections 6, 7 and 18 are rolling, while numbers 19, 30 and 31 are hilly country. Eastwards, rough and stony. The soil is sandy and gravelly. Creeks cross the line in Sections 12 and 25.—*T. R. Hewson*, 1883.

Sub-division.—Rolling prairie. The South Saskatchewan runs through the north-west portion, breaking up the surface by ravines and stony knolls for some distance inland. The southern portion is fairly adapted for agriculture, having a mixed clay soil on clay subsoil.—*P. Burnet*, 1883.

- 24. Outlines**.—North, dry, undulating prairie across this range. The soil is clay and clay loam, of 1st and 2nd quality. Dry country, having but few sloughs in which water is to be found.—*T. Kains*, 1882.

The west consists of undulating prairie, well adapted to farming. The soil is heavy clay. The South Saskatchewan flows along the southern boundary for a distance of about two miles, passing through Sections 5 and 6 and then through Section 4, the north-west corner of Section 3, and then eastwardly through Sections 10, 11 and 12. There is no timber, except along the banks of the river. The east is rolling and hilly prairie. Very rough and stony in places. A trail was crossed in Section 24.—*T. R. Hewson*, 1882.

Sub-division.—Chiefly a prairie township. Northwards it is undulating land; good clay soil; adapted for agriculture. The southern portion is much broken up by the valley of the South Saskatchewan River, and is permeated by deep ravines and coulees, having a scanty supply of wood.—*P. Burnet*, 1883.

- 25. Outlines**.—Is rolling on the west boundary and in the north-east, and level or undulating prairie in the centre. The soil is a clay loam, with a clay subsoil, and classes 1 and 2. There are many sloughs and hay marshes in the township. The southerly two-thirds of the easterly tier of Sections is occupied by a range of hills about 75 feet above the prairie. This range runs north and south, and is probably about three miles across. Surface water is more plentiful along this boundary than elsewhere.—*P. R. A. Belanger*, 1883.

The southern portion of this township is undulating prairie, with a clay and clay loam soil, of classes 1 and 2. There are only a few sloughs.—*T. Kains*, 1882.

Sub-division.—Surface rolling. Soil, mostly clay, on clay subsoil. In some places light clay, sandy loam and clay loam occur.

Water is very scarce. The south-eastern portion is hilly prairie. No wood. The township is not a favorable one for settlement, although not to be discarded altogether.—*S. M. Starkey*, 1883.

- 26. Outlines.**—Is all level prairie, with the exception of Sections 1, 12 and 13, and parts of 24 and 25, which are occupied by the continuation of the hills referred to in Township 25. The soil, which has been rated 1st class, is clay on the level prairie, and clay loam, with clay subsoil, on the hills, and is excellent for farming purposes. A small lake, about two miles long by three-quarters of a mile broad, appears to be partly located on Section 34. There is also a pond on Section 30.—*P. R. A. Belanger*, 1883.

Sub division.—This township is most suitable for grazing. Some parts are hilly prairie, but most is level and rolling. Soil, clay and clay loam, generally up to class 2. Fresh water, generally, is scarce; but some large alkaline lakes occur in the township.—*S. M. Starkey*, 1883.

- 27 Outlines.**—Is undulating and level prairie, rated classes 1 and 2. The soil, which consists of clay, is very hard in some places. A small lake about two miles long by three-quarters of a mile broad, occupies part of Sections 2 and 11. It appears to be shallow, and its water is alkaline; it is bordered by clay banks about 30 feet high. A valley of the same width as the lake runs northerly to a large marsh in Township 28.—*P. R. A. Belanger*, 1883.

- 28. Outlines.**—Along the north of this township the surface is rolling and undulating prairie. The soil is a good clay loam. Class 2. Eastwards it is stony in spots, but westwards it is very stony. Several clay flats were passed over. Surface water is in fair supply. There is no wood.—*T. Fawcett*, 1883.

Is undulating prairie, with a first class soil of clay and clay loam. There is a large hay marsh, about four miles long and three-quarters of a mile broad, in the south-west half. South of this there passes the cart trail from the Forks of the Red Deer to the Elbow of the Saskatchewan. A creek crosses the east line in Section 25.—*P. R. A. Belanger*, 1883.

- 29. Outlines.**—Is rolling prairie. The soil is a good clay loam and a sandy loam, alternating. Water generally scarce. No wood. A lake in the south-west.—*J. A. Maddock*, 1883.

South, undulating prairie. The soil is a good clay loam, with scattered boulders. It is traversed by several alkaline clay flats.—*T. Fawcett*, 1883.

- 30. Outlines.**—Is rolling prairie to the east and level prairie to the west. The soil is a good clay loam to the west and south-east, and a sandy loam to the north-east. Water is scarce, only one marsh being crossed on the east boundary.—*J. A. Maddock*, 1883.

- 31. Outlines.**—Is all rolling prairie, with a hummocky surface in places. Water of good quality is rather scarce. No timber whatever. The soil is principally clay loam. Classes 1 and 2.—*F. W. Wilkins*, 1884.

- 32. Outlines.**—North: rolling prairie. First and second class soil. A large lake touches the eastern limit of Section 36.—*E. Bray*, 1883.
Is entirely rolling prairie. Good water is found everywhere throughout the township. There is no timber of any kind. The soil is principally a clay loam. Classes 1 and 2.—*F. W. Wilkins*, 1884.
- 33. Outlines.**—Is rolling to hilly prairie, rising to a considerable elevation in the central portion. Good water in abundance. No timber. Soil principally clay loam, though there is some gravelly and stony land. Classes 2 and 3.—*F. W. Wilkins*, 1884.
South, rolling prairie. Soil, first and second class.—*E. Bray*, 1883.
- 34. Outlines.**—Is principally rolling prairie, though along the western side there is a considerable stretch of knolly country. These knolls are composed of almost pure sand. There is plenty of good water everywhere. There is no timber, other than poplar and cherry bushes on the sand knolls. The soil—with the exception of the sand knolls—is generally a clay loam. The classes, all round, are from 1 to 4.—*F. W. Wilkins*, 1884.
- 35. Outlines.**—Has a high rolling or broken surface in the north-east half; the remainder is undulating or rolling. In the south-westerly corner a small alkaline lake enters. Large ponds and sloughs, containing good water, are generally distributed with good grasses around all of them. The hilly land in this township is well adapted for grazing purposes. The soil is loam, with clay subsoil, or sandy loam. Rates from first to third class. There is a considerable lake in nearly all of Section 36.—*J. F. Garden*, 1883.
- 36. Outlines.**—North, rolling prairie. The alluvial soil is marl, from 6 to 10 inches in depth, and the subsoil is clay. Class 2.—*W. A. Ashe*, 1883.
Has an undulating or high rolling surface, with a large quantity of water in ponds and sloughs. Two coulees, or ravines, containing ponds and sloughs, and a large weedy lake, cross the south, western portion. The soil is principally a clay loam, from first to second class. An old cart trail to Edmonton crosses east and west.—*J. F. Garden*, 1883.
- 37. Outlines.**—Is divided by a coulée, 80 to 100 feet deep, extending from the south-east in a north-westerly direction, containing lakes, ponds and sloughs of good water. The land in the south-west of it is undulating or rolling, with a heavy clay loam. Classed from first to second. The north-west part is broken by hills, ponds and sloughs, and some stones, with appearance of alkali in places. The grazing is good around the ponds, but this part is generally ranked as third class.—*J. F. Garden*, 1883.
- 38. Outlines.**—This township is generally high, and broken by ridges, sloughs, ponds and scattered stones. The soil, in many places, is a hard baked clay. Good grass and pasturage abound in all the hollows. Around some of the sloughs in the north-west quarter of the township there is alkali in the earth. The soil all round will average class 3. There appears to be a large lake or wet area

in the centre of the township, which probably covers about 1,200 acres, and is formed at the base of the Ear Hills.—*J. F. Garden, 1883.*

39. *Outlines.*—Is undulating or rolling, on its western side, but rough and broken, towards the east, by a coulée and valley, containing lakes and ponds. A lake,* about half a mile wide by two or three long, with some poplar bush on the east bank, was noticed about midway between the east and west boundary, running north and south. Large numbers of sloughs and ponds exist in the south-west part. The soil is loam or clay loam, with some gravel ridges and scattered stones. Classes second to third.—*J. F. Garden, 1883.*

40. *Outlines.*—North, the easterly half is good—all prairie, and somewhat rolling. In the west half sandhills break the country, and it becomes scrubby.—*G. B. Abrey, 1883.*

This township has an undulating or rolling surface, except in the north-west corner, where a large valley—containing lakes and sand ridges, with cherry bushes—enters it. It is also broken by a coulée 100 feet deep, containing stones and alkali, which enters the township at the south-east corner and runs in a north-westerly direction. The soil is chiefly a sandy loam, and classes from second to third. A large grass marsh, with poor water, covers Sections 25, 36 and parts of 35 and 26.—*J. F. Garden, 1883.*

41. *Outlines.*—The west half is very much broken by a series of hills and valleys, the latter containing salt lakes, some of considerable size. Small poplar, in bluffs, grows on the hill sides and in some of the ravines. East half is rolling and undulating prairie; first and second class land. Soil, clay loam, 12 inches in depth, and varying to sandy loam; sand subsoil.—*H. B. Proudfoot, 1883.*

The south-easterly portion of this township is all slightly rolling and the soil very good. The Battleford trail crosses this part. The south-west is sandy, scrubby and broken.—*G. B. Abrey, 1883.*

42. *Outlines.*—The north-west quarter is rough and hilly, with numerous ponds and grass swamps, and some scrub. The south-west quarter is very much broken by a series of hills and valleys, the latter containing salt lakes, some of considerable size, and small poplar in bluffs. The east half is rolling and undulating prairie. First and second class land. Soil, clay loam, 12 inches in depth, and varying to sandy loam; sand subsoil. Those portions which are rough and broken by small sandy ridges are chiefly covered by a growth of scattered poplar and scrub.—*H. B. Proudfoot, 1883.*

43. *Outlines.*—West, very hilly prairie, with numerous ponds of both fresh and salt water intervening. Soil, second and third class. First class prairie on the east boundary.—*J. K. McLean, 1883.*

44. *Outlines.*—West, very hilly prairie, with numerous ponds of both fresh and salt water intervening. Soil is second and third class. First class prairie on the east boundary.—*J. K. McLean, 1883.*

* Garden's sketch shows this lake on Township 40.

Entering this township by the south-east corner, and proceeding westwards, the first three miles are flat and level prairie, with an occasional rolling portion, broken by a few ponds. The south-westerly portion is more rolling and undulating, with a sparse growth of poplar scrub, and a considerable scattering of surface water in ponds and marshes.—*W. A. Ashe, 1883.*

- 45. Outlines.**—More or less broken in the northerly portion by ravines running into the valley of the Battle River, and by the valley of the Battle River itself. Soil, generally sandy loam, changing to clay loam, with a changeable subsoil. Along the western boundary there are numerous ponds, marshes, several creeks and one or two lakes. There are also some bluffs of poplar, and the surface is high rolling to hilly. Along the eastern side the south-eastern portion is all rolling and scrubby. The northern half of the line resembles the western side of the township.—*H. B. Proudfoot, 1883.*

Sub-division.—Sections 33, 34, 35 and 36, situated on the south branch of Battle River, are broken by ravines leading to the river. These sections are covered with burnt timber and brush, except the north-west portion of 33, which is hilly prairie. Sections 6, 7, 18, 17, 19, 24, 25 and 29 are hilly, and for the most part covered with timber. Sections 30, 31, 32 and 33 are hilly, the remaining sections, which, with Nos. 6, 7 and 18, form the south half, are classed as rolling and undulating, tending to flat prairie in the south-east corner. Soil, generally black loam, 6 to 8 inches deep, with clay and clay and gravel subsoil. There is a good growth of grass, and the township is well suited for farming purposes. Timber is poplar, ranging from 6 to 18 inches diameter. The heavy timber lies in a belt occupying Sections 19 to 24. Water is plentiful in a number of large lakes, and several smaller ones and ponds. Sufficient quantity of timber for fuel, fencing and building is found.—*J. S. O'Dwyer, 1884.*

- 46. Outlines.**—Traversed diagonally by the Battle River. Good poplar and balm of Gilead wood occur in the valley. First class farming land.—*H. B. Proudfoot, 1883.*

Sub-division.—The south half is traversed by Battle River, which enters near the south-west corner of Section 19, flows in a south-easterly direction for about three miles, then turns and passes through the remainder, in an easterly course, emerging at 14 chains north of the south-east corner. That portion lying to the south of the river, with the exception of Section 7 and the west half of 18, lying wholly in the river flat, is much broken by the banks of the river and by ravines leading into it. North of the river the country is similar, being hilly, and having a number of lakes. South of the river the soil is generally loam, with clay subsoil. North, it is sandy loam, 2 to 4 inches deep, with sand and sand and gravel subsoil. Ranks third class. In the river valley there is a considerable amount of heavy poplar, reaching to 20 inches in diameter, most of it sound and of good quality. North of the river, and outside of the valley, the timber is much smaller in size, 4 to 8 inches, and chiefly scrub poplar, though along the

north outline poplar of a large size, 8 to 12 inches, is met with occasionally. In south-east corner timber has been burnt over, but is still standing. River water is good, also that in the lakes, except in Nos. 4 and 5. Section 7 and parts of 5, 6 and 18, being in river bottom, have black loam soil, and are good farming lands. North of the river the soil is light and grass poor. With the exception of the sections mentioned, the township is not adapted either to grazing or farming.—*J. S. O'Dwyer*, 1884.

47. *Outlines*.—Rolling and undulating, with poplar and willows in large bluffs. Water is plentifully distributed in small marshes and ponds over the western side of the township, and there are several large lakes in the south.—*H. B. Proudfoot*, 1883.

The southern boundary is greatly submerged by a long lake. The soil along the boundary is poor, and third class. There is a great deal of scrub poplar, but occasionally larger trees, from 8 to 12 inches in diameter, are met with.—*J. S. O'Dwyer*, 1884.

Sub-division.—Level prairie, thickly interspersed with poplar bluffs. There are some small ponds fringed with willows. There is sufficient timber for fuel, fencing and small buildings. Soil is sandy loam, resting on subsoil of marly clay. The trail from Battleford to Fort Edmonton traverses the township in an almost due westerly direction, as does also the telegraph line in a north and south direction. Sections 6 and 7 are traversed by a range of hills, having an elevation of 150 feet.—*J. McArthur*, 1884.

48. *Outlines*.—North, level prairie, with a few bluffs of poplar, burnt woods and clumps of willow. Soil, sandy and black loam, about 6 inches deep, with sandy subsoil. Class 2. Water is not plentiful, though a little was seen in ponds.—*W. A. Ashe*, 1883.

Rolling and undulating, with poplar and willows in large bluffs in the west, and in the south-west and east numerous ponds and marshes, and several creeks.—*H. B. Proudfoot*, 1883.

Sub-division.—Is very level. There are no running streams, at this season of the year—September—being all dried up, except a few stagnant pools. The north-eastern part is level prairie, with a few bluffs of poplar and willow, but the southern and western tiers of sections are thickly interspersed with poplar, some of them about 8 inches in diameter. Soil, sandy loam, with subsoil of marly clay.—*J. McArthur*, 1884.

49. *Outlines*.—West, covered with a thick growth of poplar and willow. The soil is first class for agricultural purposes. East, a growth of poplar and willow scrub covers the country through Section 1, and partially through 12. Here a hill, about 60 feet high, occurs, with a thick growth of poplar scrub on the northerly slope. Beyond the hill, northwards the country is slightly rolling prairie, and first class. Sections 36 and 25 contain poplar bluffs. Big Gully Creek crosses Section 24, the banks not being more than 20 feet high.—*J. K. McLean*, 1883.

South, level prairie, with a few bluffs of poplar and clumps of willows. Soil, sandy and black loam. Class 2. Water scarce.—*W. A. Ashe*, 1883.

Sub-division.—Is uneven in the vicinity of Big Gully Creek, which runs in an easterly direction through the centre of the township. This creek contains good water, is from 1 to 6 feet deep, and from 30 links to a chain wide. The valley is nearly a mile wide, and is at least 150 feet below the level of the surrounding country. In some places its course is obstructed by beaver dams. The trail from Battleford to Fort Pitt traverses the township. There is sufficient timber for fencing and fuel for some years, and building timber could be obtained at the Saskatchewan River. The soil, for the most part, is a sandy loam, resting on a subsoil of white clay, is easily cultivated, and is suitable for agricultural purposes.—*J. McArthur*, 1884.

50. *Outlines.*—West, covered with a thick growth of poplar and willow. The soil is first class for agricultural purposes. East, first class soil, with numerous bluffs. Section 1 is sandy, covered with small poplar. The North Saskatchewan River crosses the north-east quarter of the township.—*J. K. McLean*, 1883.
51. *Outlines.*—Rolling country, of a good sandy loam soil, although it is very stony in places. Bluffs of poplar, averaging from 1 to 4 inches in diameter, are very thick. Nearly every marsh is surrounded with a border of willows. More than two-thirds of the surface is covered with wood. The Saskatchewan River crosses the township from Section 12, and the south-east corner of the township falls in the river. The banks of the river are about 200 feet high, but are rather easy of access. The telegraph line crosses the north-east corner, and the river trail follows the same course about two miles south of the telegraph line.—*J. I. Dufresne*, 1884.
52. *Outlines.*—Undulating prairie, with good sandy loam soil. Several little creeks are crossed in this township. The prairie is intersected by small bluffs of poplars and willows. In the central portion the bluffs are larger, leaving a little more than half prairie.—*J. I. Dufresne*, 1884.
53. *Outlines.*—Appears to be rolling prairie of a sandy loam soil. Numerous bluffs of small poplars and willows are met with on the south part. Thicker bluffs of larger size trees are seen in the northern part. A fresh creek, 2 feet in depth, runs its water—apparently—across it, from north to south. The soil is generally a good sandy loam.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXIV.

5. *Outlines*.—West, rolling prairie. The line crosses trails in Sections 7 and 19. A little scrub was found in Sections 30 and 31.—*E. Boivin*, 1884.

South, hilly prairie, with stones on the summits of the hills. The water in the marshes had all evaporated at the time of survey (July and August). In Section 6 the line crossed a trail.—*O. J. Klotz*, 1883.

6. *Outlines*.—West, broken and hilly prairie, with scrub. White Mud River crosses the line several times in Section 18, and flows close and almost parallel to it in Section 19.—*E. Boivin*, 1884.

7. *Outlines*.—Hilly and stony. The soil is sandy and gravelly loam. A creek was crossed in Section 35, and three in Section 33. Timber was found on the slopes of the hills and near the creeks.—*E. Boivin*, 1884.

West, undulating prairie. In Sections 30 and 31 the surface is broken by hills and ravines. Pasturage is good. A creek crosses the line in Section 18.—*T. Fawcett*, 1882.

8. *Outlines*.—Sections 31, 32 and 33 are prairie plateau, rolling and undulating ; 34 is a level plateau, and 35 and 36 broken by hills and ravines. Creeks were crossed in Sections 33 and 34. The soil is clay loam, varying from 1 to 8 inches in depth, underlaid with clay or gravel. West, undulating, hilly and stony prairie, broken by numerous ravines. Two branches of a creek were crossed in Section 18, and in 30 another creek.—*T. Fawcett*, 1882.

Sub-division.—This township is situate in the Cypress Hills country. It is hilly, stony and heavy rolling prairie. The soil consists of various kinds, being black and sandy loams, often gravelly, and 3 to 6 inches deep, on sandy and gravelly subsoils. The south and the south-west of the township is not desirable for settlement, owing to the hilly nature of the surface. The north is more level, and contains some good bottom land. There are a few bluffs of willows in the south-east corner of the township. These are intermingled with small brush, and good only for fuel. Water is scarce in the north, and there are a few creeks in the south having good water. The run of the water is generally to the south and south-west.—*E. Boivin*, 1884.

9. *Outlines*.—Sections 3 to 7 and 18, on the south and west, lie in the Cypress Hills plateau. The remainder of the township, or about the northerly one-third, lies on the northern slope of the hills, and is densely wooded. The belt of timber here extends about 6 miles along the slope of the plateau, and has an average width of $2\frac{1}{2}$ miles. The wood is principally poplar, and is of sufficient dimensions for ordinary building purposes. Eastward from this belt, as

far as visible, the slope of the hill seems dotted with groves of poplar timber, but none of considerable extent. The height of the plateau is here about 400 feet, and the slope is intersected by numerous spring creeks, most of which drain to a large lake seen north-east. The soil throughout is dark loam, underlaid with gravel.—*T. Fawcett*, 1882.

The south-east is high, rolling prairie, the soil of which is a good loam, but gravelly. The north-east is hilly, sloping to the north, and covered with a dense growth of poplar and willow. A good sized creek crosses Section 25, on which there was a small show of coal.—*A. F. Cotton*, 1883.

Sub-division.—All on the Cypress Hills plateau. South half, all high, open and undulating, with a scarcity of water. The north half is broken by numerous deep wooded gullies, traversed by spring creeks. One-third of the township is bush. Pie-a-Pot and Bear Creeks, and branches, drain the north. In Sections 22, 27 and 28 are large springs of water, and in 21, 22 and 23 a soft sandstone strata is exposed. The abundance of wood and water makes this township desirable, but its elevation may subject it to summer frosts. The soil, especially northwards, appears to be rich, having excellent grass. The north line crosses the Wood Mountain trail in Sections 33 and 34. This trail goes to the south-east corner.—*W. Chipman*, 1883.

- 10. Outlines.**—This township lies at the foot of the slope of the Cypress Hills, which bear away to the south. West, Sections 7 and 18 lie in a basin, through which a rapid stream, 8 feet in width, runs. Like all streams from the Cypress Hills, it has a hard, shingly or stony bed, with a rapid current. The western bank is wooded with dense willow, poplar, thorns and other scrub. The north-west of the township is nearly level.—*T. Fawcett*, 1882.

East, the south half is hilly and broken prairie, the soil of which is a light, sandy loam, and stony, with wood in Section 1. The north half is rolling prairie, the soil being a little better than the south half, but very stony in a great many places.—*A. F. Cotton*, 1883.

Sub-division.—Lies at the base of the Cypress Hills plateau. Sections 1, 2 and 12 are rough and hilly. The township plateau is broken by many deep gullies, filled with bush and scrub, and eroded by small streams which spring from the soft sandstone strata. Pie-a-Pot Creek—10 feet wide, with swift current—flows north-westerly through the west part of the township, and is fed by many small streams. The soil is generally gravelly; but the township is well adapted for grazing, having excellent grass, wood, water and shelter.—*W. Chipman*, 1883.

- 11. Outlines.**—Most of this township is rolling prairie, but there are many level parts. The soil is generally classes 2 and 3. Some good hay marshes were crossed in the west, and there is a good deal of gravel in the east. The Canadian Pacific Railway crosses in the north and the Fort Walsh and Qu'Appelle trail about the centre of the township. Bear Creek crosses the east line four times in Section 24.—*A. F. Cotton*, 1884.

Sub-division.—Bear Creek traverses the west from south to north, in a valley which gradually widens northwards. There is a fine creek in the south, in a bed 20 feet wide, with fair fishing in it. A valley, with a marshy creek, connects from here to Bear Creek. In these valleys there are hay lands, but the central and south-east parts of the township are high and rolling. Class 3. Colly, a coaling station of the Canadian Pacific Railway, is situate on Sections 31 and 32. No wood, except a very little timber in Section 6.—*W. Chipman*, 1883.

12. *Outlines.*—North, land in general is sandy and not suitable for farming purposes, but will make fair grazing land. Water mostly alkaline.—*W. T. Thompson*, 1882.

The west and the south-east of the township is rolling prairie, and the north-east is level. Pie-a-Pot Creek flows north-east through the south-east quarter of the township. North of this creek, on the east side, the soil is a stiff clay. South of it the surface is hilly and stony, but the soil is a good loam. There is a narrow fringe of maple along the banks of the creek. There is a large hay marsh in Section 18, but generally surface water is scarce.—*A. F. Cotton*, 1883.

Sub-division.—Is crossed by a range of low, broken sandhills, in some places not sodded, and therefore drifting. North of the hills there is no fresh water. The soil is class 3, being a light sandy loam, in places gravelly. Bear Creek crosses the south-east corner of the township. At the time of survey (August) there was no water in the creek bed, except in pools. The hay in the valley was luxuriant. The main line of the Canadian Pacific Railway crosses the southern part of Sections 1 and 2. There is no wood of any description in this township.—*W. Chipman*, 1883.

13. *Outlines.*—West and south, rolling prairie. Soil, light and sandy. Poor for farming, but fair for grazing.—*W. T. Thompson*, 1882.

The east centre sections are occupied by a large arm of Crane Lake. The land lying west of this lake is a good sandy loam. Three small arms of Crane Lake, 10, 13 and 26 chains in width, respectively, extend across the line on Section 1. The country along the line is mainly rolling prairie, with sandy soil, chiefly class 1 and 2, the latter predominating.—*J. G. Sing*, 1882.

Sub-division.—The belt of drifting sand dies out in Section 36. Crane Lake covers part of Sections 13, 14, 15, 22, 23 and 24. The water is fine and clear; the beach sandy and the banks well defined, except on the south side, where the country is very flat and almost level with the lake. The land is rolling and the soil very light.—*C. Desjardins*, 1883.

14. *Outlines.*—West, broken prairie, with drifting sand and sandhills. Line runs into Big Stick Lake in Section 31.—*W. T. Thompson*, 1883.

This township is composed of sandhills, and, except in the south, towards Crane Lake, and in the north-west corner, where it is broken by Big Stick Lake, mostly rolling prairie. On Section 13 the line crosses a pond of bad water 10 chains wide. There is more water a few chains off the line, on Section 24 and 25.—*J. G. Sing*, 1882.

Sub-division.—Big Stick Lake covers Sections 31 and 32, and part of 29. The whole township is covered with drifting sandhills, and is completely unfit for cultivation.—*C. Desjardins*, 1883.

- 51. Outlines.**—North, rolling and stony prairie. No water seen along the line.—*C. C. DuBerger*, 1883.

The south-west portion of the township, as far north as Section 19, is submerged by Big Stick Lake. An old cart trail crosses Section 30. There are level and hilly parts in the north-west portion of the township, where the surface is undulating and soil clay loam. The sandhills extend to the lake on the south and east sides, showing a barren surface. North-east from the lake there is a belt of timber.—*T. Fawcett*, 1882.

Sub-division.—Generally rolling and sandy. Large sandhills occur in the south-east corner, and in places drifting sand occurs. A large part of the township is a sandy clay soil, of various classes—2 to 4. The south-west portion is broken by Big Stick Lake, which is slightly alkaline. Is generally rolling and sandy. The south-east corner is on great sandhills, and the remainder is generally covered by sand driftings. The water, for the most part, is fresh. The south-western part is broken by Big Stick Lake. The soil is class 2.—*C. C. DuBerger*, 1883.

- 16. Outlines.**—Along the north boundary several fresh-water marshes exist. Vegetation is luxuriant and the soil of good quality, while some ridges and hill tops are stony. Southward, from the north-west corner, for the first four miles, the soil consists of a mixture of sand drifting from the sandhills to the east. In Section 7 the clay loam comes to the surface, and continues until the line intersects Big Stick Lake, in Township 15. The surface is undulating throughout.—*T. Fawcett*, 1882.

East, rolling, hilly and rough. Sections 1, 12, 13, and part of 24, are bare sand.—*A. C. Talbot*, 1882.

Sub-division.—Generally rolling. Soils, clay, sandy clay, sand and gravel, and sand. Classes 2 to 4. To the south a ravine, about 100 feet deep, crosses the township, in which are a number of ponds of fresh water.—*C. C. DuBerger*, 1883.

- 17. Outlines.**—West, the surface is very undulating, the soil a clay loam, with clay subsoil. A few of the hill tops are stony, and soil is mixed with gravel. Several fresh-water marshes were met with near the line.—*T. Fawcett*, 1882.

East, rolling and sometimes hilly prairie. Sandy loam soil, with sand subsoil. Fresh-water ponds are very scarce, but good water may be found almost any place by digging a few feet below the surface. Large salt-water lakes exist, with water unfit for use.—*H. B. Proudfoot*, 1883.

Several fresh-water marshes near the south boundary. Luxuriant vegetation and good soil. Some ridges and hill tops are stony.—*T. Fawcett*, 1882.

Sub-division.—In places hilly, but generally rolling prairie, a good deal stony, with limestone gravel. Soil, clay, clay loam, also sandy loam, with clay, sand and gravel subsoil. A few small ponds of good water are scattered throughout, also some alkaline

ponds. The general aspect of the land towards the north of the township is good, and well suited for settlement. No wood.—*D. C. O'Keeffe*, 1883.

18. *Outlines*.—The sandhills of Ranges 22 and 23 only extend west into the township on Sections 35 and 36. After leaving the hills, going westward, the soil becomes better, and the western portion of this township is a fine rolling prairie, with a sandy loam soil.—*L. Bolton*, 1882.

West, the surface is very undulating, the soil a clay loam with clay subsoil. A few of the hill tops are stony, and soil is mixed with gravel. Several fresh-water marshes were met with near the line.—*T. Fawcett*, 1882.

East, rolling and sometimes hilly prairie. Sandy loam soil, with sand subsoil. Fresh-water ponds are very scarce, but good water may be found any place by digging a few feet below the surface. Some scrub along the line.—*H. B. Proudfoot*, 1883.

Sub-division.—The east two and a-half tiers of sections are sandy, and the north-east part sandhills and drift sand. The remaining portion of the township is fair, and is well suited for agricultural purposes and settlement. Water is scarce, except a few ponds in the valleys. Soil, parts clay, clay loam and sandy loam, on sandy and clay subsoils. No wood.—*D. C. O'Keeffe*, 1882.

19. *Outlines*.—The west has numerous small tracts of alkaline land, but in all other respects the country has a good appearance.—*E. Bray*, 1882.

The eastern portion of the township is in the Great Sandhills. It is rough and broken prairie, having a good deal of drifting sand, and, in places, covered with occasional patches of scrub, with some very small poplar and birch, particularly towards the north end of the line. There were some hay meadows on Section 36, but else where there were no indications of surface water.—*H. B. Proudfoot*, 1882.

Entering the township at the south-east corner, the sandhills which stretch away to the east are still met with. Their western limit is reached in Section 2, but this limit appears to bear away to the north-west of the township. The south-west is fine rolling prairie, with a sandy loam soil, improving to the west.—*L. Bolton*, 1882.

Sub-division.—The easterly half is sandhills and drift sand, with occasional patches of cherry and willow scrub, also some poplar and birch. The eastern part is a dry, undulating prairie, with a sandy clay soil on a similar subsoil. Water is scarce, but what there is, is good. The localities, however, not inviting while better land is obtainable.—*D. C. O'Keeffe*, 1883.

20. *Outlines*.—North, rolling prairie, with sandy loam soil, which improves in quality to the north, while to the south more sand was found. Going south, on the west boundary, are sandhills one and a-half miles from the north line, and thence sandhills alternate with sandy prairie to the southern boundary of the township.—*E. Bray*, 1882.

Going north, on the eastern boundary, there is a mile and a-half of a sandy plain; then there are several miles of drifting sand hills; then the last mile and a-half—that is, in Sections 25 and 36—is the only part fit for settlement.—*H. B. Proudfoot*, 1882.

Sub-division.—The greater part of this township is sandhills and drift sand. The two tiers of sections in the north are fair, having a sandy loam soil on a sandy subsoil. Good water is scarce, and in the valleys small alkaline flats occur, and occasionally scrub willows and cherry, with some small poplar and birch. Sections 5 and 6 are south of the sandhills; their soil is somewhat mixed with loam and underlaid by subsoil of sand.—*D. C. O'Keeffe*, 1883.

- 21. Outlines**.—Going west, along the southern boundary, and north along the western boundary, the surface is all rolling prairie. In the south the soil is a sandy loam, which is somewhat of a light consistency, owing to the proximity of the sandhills in the township southwards. Going north, however, the soil improves very much in quality, as the influence of the sandhills is removed. On the western boundary there are a few stony hills. Water, generally, is scarce, as there were only three small marshes crossed on both lines.—*E. Bray*, 1882.

Eastwards, this township is undulating prairie, with heavy clay soil, well adapted to farming. Trail to the Red Deer Forks crosses the line in Section 25.—*T. R. Hewson*, 1882.

Sub-division.—Undulating prairie. Soil, clay, with subsoil of same. Would produce good grain or root crops, according to the rainfall of the season, and is fairly adapted for settlement. Surface water is scarce, and there is no wood. The Red Deer Forks trail crosses the township.—*D. C. O'Keeffe*, 1883.

- 22. Outlines**.—West, rolling prairie, with a few stony hills. Soil is of a fair quality.—*E. Bray*, 1882.

North and east, this township is undulating prairie, with heavy clay soil, and is well adapted for farming. A trail was crossed in Section 24, and a small lake in 36.—*T. R. Hewson*, 1882.

Sub-division.—Undulating prairie. Soil, clay, on heavy clay subsoil. Water is scarce, except by digging. With favorable seasons, crops ought to be good in this township, and it is well suited for settlement. There is no wood. A trail to Red Deer Forks crosses in Section 4.—*D. C. O'Keeffe*, 1883.

- 23. Outlines**.—The northern part of this township is in the valley of the South Saskatchewan River, which, on the western side, extends south to Section 19. The river bed is only 350 yards wide, partly occupied by sand bars, and traverses Sections 30 and 31. Lignite was noticed in the sands. The land to the south of the river is undulating prairie, and improves, from a second class near the river, to first class quality in the vicinity of the south boundary.—*T. Kains*, 1882.

This township consists mostly of undulating prairie. The South Saskatchewan River passes through Section 31 and along the northern boundary of Sections 35 and 36. Along this river

the township is very much broken by deep coulées, extending in all directions and running back into the prairie for about two miles. There is no timber, except along the banks of the river. The soil is a heavy clay, and well adapted for farming. East, Sections 1, 12 and 13 are rolling, while numbers 24, 25 and 36 are hilly country. South, all rolling prairie.—*T. R. Hewson, 1882.*

Sub-division.—Southwards, rolling prairie. Soil, clay loam, well adapted for agriculture. Northwards, broken by deep ravines, caused by and extending from the valley of the Saskatchewan River, which crosses the north boundary in two places. The river flats are very sandy, and scattered groves of cottonwood, cherry, &c., occur along its banks, and in some of the ravines.—*P. Burnet, 1883.*

- 24. Outlines.**—North and west, dry undulating prairie, with clay and clay loam, of classes 1 and 2, having only a few sloughs. The valley of the South Saskatchewan River enters near the south limit of this township. Trails cross the line in Sections 6 and 7.—*T. Kains, 1882.*

Consists of undulating prairie, with heavy clay soil, well adapted to farming. The South Saskatchewan River passes through Sections 1 to 5 inclusive, and along the extreme south-east corner of Section 6. The only timber to be found is that along the banks of the river. East, undulating, with clay soil. In 13 a cart trail passes parallel to the river.—*T. R. Hewson, 1882.*

Sub-division.—The Saskatchewan River crosses the southern boundary twice, and for a mile north of it the country is much broken by ravines, having some groves of cottonwood, cherry, &c. Northwards from this, however, the land is rolling prairie; good soil and well suited for settlement.—*P. Burnet, 1883.*

- 25. Outlines.**—This township is all rolling prairie, with the exception of the south-western quarter, which is high-rolling. The elevations are somewhat stony. The soil ranks as classes 1 and 2, and is a good sandy loam, which is underlaid with a clay subsoil. Many hay marshes furnish abundance of good water.—*P. R. A. Belanger, 1883.*

South, undulating prairie. Soil, clay and clay loam. Classes 1 and 2. Dry country, having but few sloughs in which water is to be found.—*T. Kains, 1882.*

Sub-division.—Well adapted for grazing. Numerous grass swamps. Soil, clay, gravel and sandy loam; subsoil, light clay; generally class 2. No wood.—*S. M. Starkey, 1883.*

- 26 Outlines.**—This township consists of a very dry and undulating prairie, and possesses a first class clay soil, which may be considered as good for wheat. There is a lake about the south centre of the township, but the only water which was crossed on either west or east lines was a pond on Section 25, which, though good, was very muddy.—*P. R. A. Belanger, 1883.*

Sub-division.—Level and rolling, and well suited for agriculture, except a narrow strip along the eastern boundary, which is hard clay. A lake of fresh water occurs on Sections 2 and 3.—*S. M. Starkey, 1883.*

- 27. Outlines.**—In the south and east it is very rolling and hilly; the hilly portions are very stony and gravelly. West and northwards the surface becomes more level and gently-rolling. The soil is generally a clay loam of 10 inches, on clay subsoil. Class 2. In the north-east it is more clayey. Several large lakes of fresh water occur in the more westerly tiers of sections. A good farming township.—*T. Fawcett, 1883.*

Is partly undulating and partly rolling prairie, well watered with numerous hay marshes and ponds. Amongst the latter is a large one, about three-quarters of a mile long by 20 chains broad. The soil ranks classes 1 and 2.—*P. R. A. Belanger, 1883.*

- 28. Outlines.**—Is rolling prairie. Classes 1 and 2. A small lake occupies part of Sections 29 and 30. It is about two miles long by 20 to 40 chains wide, and appears to be 6 feet deep. Its water is somewhat alkaline. Fresh water is to be found in few marshes.—*P. R. A. Belanger, 1883.*

The north of this township is rolling and hilly, and generally a very stony clay loam. Classes 2 and 3. In Section 34 some ridges attain 100 feet, and are covered with scrub and sage bush. Generally, vegetation is scarce and the soil is light. In Section 33 the line crosses a long alkaline lake.—*T. Fawcett, 1883.*

- 29. Outlines.**—Is rolling prairie to the east and heavily-rolling to the west. A large alkaline lake, about 20 chains wide, in a deep valley, runs north and south from the base through the centre of this township. The soil is clay loam and sandy loam alternating.—*J. A. Maddock, 1883.*

South, the soil is of a light nature, and supports a stunted vegetation. A long and narrow lake, which extends northwards into the township, crosses Section 4.—*T. Fawcett, 1883.*

- 30. Outlines.**—Is undulating prairie to the east, and heavily-rolling to the west. A large alkaline lake runs north and south through the centre of this township and passes to the west, about two miles south of the northern boundary. The soil is a good clay loam to the east and a sandy loam to the west.—*J. A. Maddock, 1883.*

- 31. Outlines.**—Is open, rolling prairie, generally, with a good deal of hummocky surface. A wide alkaline valley crosses near the west side. There is a fair supply of good water. There is no timber of any kind. The soil is generally a clay loam, and may be found in all grades, from the best quality downwards.—*F. W. Wilkins, 1884.*

- 32. Outlines.**—North, rolling prairie. Good land. Section 34 lies in a valley in which there is a stream without perceptible current. The soil in this valley is alkaline.—*E. Bray, 1883.*

This township is rolling prairie throughout, with a hummocky surface, and is traversed in a north-easterly direction by a wide alkaline valley. Good water is reasonably plentiful. There is no wood whatever. The soil—except in the alkaline valley—is a clay loam, and the grades run from 1 to 4. A trail to Battleford crosses the north-west corner.—*F. W. Wilkins, 1884.*

- 33. Outlines.**—Is generally rolling prairie, traversed from north to south by a broad alkaline valley, containing marshes and lakelets. The sides of this valley are very stony. Good water is plentiful, but there is no timber of any kind. The soil is generally clay loam, and classed from 1 to 4.—*F. W. Wilkins*, 1884.

South, good rolling prairie. A stream, with a sluggish current, crosses Section 3. The soil in the valley is alkaline.—*E. Bray*, 1883.

- 34. Outlines.**—Is principally rolling prairie. In the eastern part there is a sandy and knolly tract. Good water is abundant throughout. There are some cherry bushes on the sand knolls, but otherwise there is no timber in the township. The soil varies from a clay loam in the west to a sand loam and a sand in the east, and with this distribution of the soil the classes vary from 1, westwards, to 4, eastwards.—*F. W. Wilkins*, 1884.

- 35. Outlines.**—Is an undulating, open prairie, with a loam soil and clay subsoil. Classed from first to second. Some scattered sloughs and stones were observed. A small alkaline lake, probably of 3,000 acres, lies in the south-east corner.—*J. F. Garden*, 1883.

- 36. Outlines.**—North, gently-rolling. Alluvial soil is from 3 to 7 inches in depth, on a clay subsoil. Classes 2 and 3. No water was seen along this line.—*W. A. Ashe*, 1882.

Is principally undulating or rolling prairie, except in the south-easterly part, where the land is somewhat broken by coulées, with sloughs and scattered stones. The soil is a hard clay loam or loam. The township is from first to second class. There is a good deal of water in the north-west part. An old cart trail crosses the township about the centre, bearing east and west.—*J. F. Garden*, 1883.

- 37. Outlines.**—The south half of the township is rolling prairie, with dry, hard clay soil, and ranks from classes 1 to 2. The northern portion is broken by large coulées, which, on Sections 22, 23 and 24, contain a large grass pond or lake. There is also another lake entering the township from the west on Sections 30 and 19. In the coulées there are also numbers of marshes and sloughs. The north-east portion is hilly, with scattered stones and sloughs in the valleys or bottoms. The soil, all round, runs from second to third class. Where the surface is rolling it is generally hummocky.—*J. F. Garden*, 1883.

- 38. Outlines.**—Principally a high and broken prairie, with sloughs and good pasturage in the hollows. An even piece of land was crossed about midway on the western boundary. The soil varies from a sandy loam, in the western, to loam and clay, with many scattered stones, in the eastern parts, and was classed from second to third.—*J. F. Garden*, 1883.

- 39. Outlines.**—Has generally a rolling or undulating surface, with a good deal of permanent water in large ponds or small lakes. One of the latter lies in the south-west corner, and is surrounded by alkali flats. The soil in the western portion is sandy, mixed with loam in different quantities, and ranging from classes 2 to 3. In

the east it is a loam and gravel soil, and class 2.—*J. F. Garden, 1883.*

- 40. Outlines.**—Very rolling, and covered with scrub for the first mile or so along the north boundary; then prairie occurs. The soil is of a poor quality throughout.—*G. B. Abrey, 1883.*

The northern half is much broken by hills, and by a coulée, from 80 to 100 feet deep, containing large ponds and sloughs, and with a small quantity of poplar bush. The soil is loam or sandy loam. The township classes from second to fourth along the western side, and owing to its not being so hilly, will rank a grade higher on the eastern side. Sounding Lake trail—indistinct and little used—crosses the township.—*J. F. Garden, 1883.*

- 41. Outlines.**—Very much broken by a series of hills and valleys, the latter containing salt lakes, some of considerable size. Small poplar in bluffs was found on the hill sides and in some of the ravines.—*H. B. Proudfoot, 1883.*

South, a little is heavily-rolling, but the greater part is ordinary prairie, having a soil of poor quality throughout.—*G. B. Abrey, 1883.*

- 42. Outlines.**—The north half is rough and hilly, with numerous ponds and grass swamps, and some scrub. The south half is very much broken by a series of hills and valleys, the latter containing salt lakes, some of considerable size. Small poplar in bluffs was found on the hill sides and in some of the ravines.—*H. B. Proudfoot, 1883.*

- 43. Outlines.**—West, very hilly. Scrub on the northerly slope of hills. East, very hilly prairie, with numerous ponds of both fresh and salt water intervening. The soil is second and third class.—*J. K. McLean, 1883.*

- 44. Outlines.**—West, very hilly. Thick bluffs of poplar, averaging 6 to 10 inches, extend south about 2 miles. Further south there is scrub on the northerly slope of hills. East, very hilly prairie, with numerous ponds of both fresh and salt water. Soil, second and third class.—*J. K. McLean, 1883.*

- 45. Outlines.**—This township is rough and hilly, more so in the north-east half than the south-east half. In the north-west portion poplar wood occurs in bluffs. These bluffs are more or less scattered all along the western boundary. There are occasional ponds or lakelets to be met with, and a couple of creeks cross the north-east, flowing to the Battle River. An old cart trail crosses the township, tracking east and west. A creek crosses the northern boundary several times, flowing to the Battle River. The soil is very fair for farming.—*H. B. Proudfoot, 1883.*

- 46. Outlines.**—Traversed diagonally by the Battle River. Good poplar and balm of Gilead wood occur in the valley. First class farming land. In a good many places in the township the surface is either hilly or very high rolling. There are several creeks flowing to the river, and in the numerous small ravines which are to be found in the township there are small springs, tributaries to

the main creeks. Several trails cross the township.—*H. B. Proudfoot*, 1883.

Sub-division.—Battle River traverses the northern half, crossing the north outline half a mile east of the north-west corner. It flows in a south-easterly and easterly course, leaving the township in the south-east corner of Section 24. The sections adjacent to the river are much broken by the banks and ravines leading into it. The remaining sections, both north and south, are hilly; those in the west and south are somewhat broken by ravines, containing creeks, which flow into the river. Sections 1, 12 and 13 lie in the river bottom, and are quite flat. Soil, north of the river, is a sandy loam, from 2 to 6 inches, with sand subsoil, and ranked 3rd class. South of the river the soil is much better, consisting of a black loam, 4 to 12 inches, with a clay or gravel subsoil. First class. A considerable quantity of large timber was found in the valley of the Battle River, ranging up to 20 inches in diameter. Outside the valley the timber is small, especially in the north part, while south of the river large timber was found outside the valley. Water in the river is good, as is also that in the large lake in Section 35 and in Section 36. North of the river the grass is poor and the soil inferior. South of the river the grass is luxuriant, and the country adapted to agriculture and grazing. Wood for building and fuel can be obtained. Sections 1, 12 and 13, in the river flat, are well suited for farming. The old trail from Fort Pitt to Sounding Lake traverses the eastern tier of sections. The average depth of water in the river is under 4 feet. A new cart trail traverses the township from east to west, and crosses the river in the north of Section 21.—*J. S. O'Dwyer*, 1884.

- 47. Outlines.**—Rolling land; thickly wooded with poplar in bluffs. Grass and willow swamps numerous, and some large lakes. Battle River crosses the south-west corner.—*H. B. Proudfoot*, 1883.

Sub-division—Is hilly and undulating. Soil, sandy loam with a subsoil of white clay, gravelly on ridges. There is a sufficient quantity of timber to meet the wants of the future settler, but there will be none for exportation. The trail from Battleford to Edmonton traverses the township and renders it easily accessible at all seasons. The telegraph line also crosses the township. Battle River traverses Sections 7 and 5 in a south-easterly direction. Timber and farm produce can be floated down to Battleford if required. The soil is easily broken.—*Jas. McArthur*, 1884.

- 48. Outlines.**—North, rolling and level. Soil, black and sandy loam, from 4 to 12 inches deep, resting on a sandy subsoil. Classes 1 and 2. The northern part of Sections 31 and 32 are broken by lakes and ponds, and, being low, are wet in the spring. Poplar and willows are found in bluffs.—*W. A. Ashe*, 1883.

Rolling land, thickly wooded with poplar and willow in bluffs. Grass and willow swamps numerous.—*H. B. Proudfoot*, 1883.

Sub-division.—Is comparatively level. The north-western portion contains very little timber, but the balance is thickly inter-

spersed with poplars, some of them being 10 inches in diameter. The soil is sandy loam, gravelly on the ridges. The subsoil is, for the most part clay. The land is easily broken and cultivated. Good water can easily be obtained in ponds, or by digging wells. There are no fixed rocks, and but few boulders on the surface. A good township for settlement.—*Jas. McArthur* 1884.

49. *Outlines.*—The township is covered with poplar and willow scrub, and there are occasional poplar bluffs, the trees of which average 8 inches in diameter. The soil is first class for agricultural purposes. Big Gully Creek crosses the township, flowing eastwards, in the bottom of a ravine, where it expands in several places into small lakes. There are occasional small ponds and marshes scattered throughout the township.—*J. K. McLean*, 1883.

South, rolling and level. Soil, black and sandy loam. Classes 1 and 2. Sections 5 and 6 are broken by lakes and ponds. Poplar and willows are found in bluffs.—*W. A. Ashe*, 1883.

Sub-division.—That portion situated south of Big Gully Creek, is level and fertile, and ranks as first class; while that on the north is uneven, and has a gravelly soil in many places. This is only second or third class. Big Gully Creek is from 30 links to a chain in width, and the valley through which it flows varies from half a mile to a mile. A belt of poplar timber intersects the southern tier of sections, and there are some bluffs of the same timber along the eastern outline. There are a few bluffs in the north-western part, but not many. Good water can be obtained at all seasons of the year. Trail from Battleford to Fort Pitt passes within one mile from the north-east corner.—*J. McArthur*, 1884.

50. *Outlines.*—West, very hilly, but suitable for grazing. The water of the numerous ponds is usually fresh. The valley of the Saskatchewan River breaks the north central portion of the township. A considerable lake occupies the south-west corner. The Fort Pitt trail crosses diagonally to the north-west. East, covered with a heavy growth of poplar and willow. The soil is first class for agricultural purposes.—*J. K. McLean*, 1883.

51. *Outlines.*—The country is rolling in the north and hilly in the south. The soil is a fair sandy loam—stony in the southern portion. The Saskatchewan River enters this township through Section 19, and after making a curve nearly touching the correction line, leaves through Section 12. The banks are of an average height of 180 feet. South of the river is prairie, covered with bluffs of small poplars and scrub willows. The western part of the township, north of river, is similar to the south; but the eastern part, north of river, is covered with small poplars and willow scrub, with small openings of prairie. The south-east corner of this township falls near a creek coming from a south-easterly direction. Part of the lake reported in the adjoining westerly township lies in Section 18, covering nearly one-third of its area. Another lake, about one mile long and 20 to 25 chains wide, lies in Section 7. The trail from Battleford to Pitt is crossed in Section 6.—*J. I. Dufresne*, 1884.

52. Outlines.—Is generally rolling, but deeply furrowed, however, in the western part, by coulées and the Saskatchewan River. This river enters in Section 18, makes a sharp curve south, and flows through Section 7, and then leaves through Section 6. The banks are about 140 feet high. Two creeks were met—one 70 links wide, with banks 60 feet high, runs south through Sections 31 and 30; the other branch of it, meeting it in Section 31, starts from a large lake, the south part of which was met on the base line in Sections 34 and 35. The trail from Pitt to Carlton is crossed in Section 34. Prairie and bluffs of small poplar, together with considerable scrub willows, cover this township. A belt, 15 chains wide, of poplars of larger growth, lies on both sides of the river, the dimension averaging 10 inches in diameter. The soil is a fairly good sandy loam, though some places are stony. It generally rates from classes $1\frac{1}{2}$ to 2. Water is good and generally abundant.—*J. I. Dufresne, 1884.*

53. Outlines.—The country appears to be generally gently-rolling. The soil is a good sandy loam. In Sections 2 and 3 there is a large lake of alkaline water. The base line crosses the south part of this lake. So far as seen, the country is prairie, covered with bluffs of small size poplars and occasional patches of scrub willows. The land sensibly rises towards the north, as seen from the base line.—*J. I. Dufresne, 1884.*

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXV.

5. *Outlines.*—West, scrub in Sections 19, 30 and 31. A cart trail in 18. East, the line crosses trails in 12 and 24. Scrub in 25 and 36. All rolling prairie.—*E. Boivin*, 1884.
6. *Outlines.*—Surveyed the north, west and east boundaries of this township, and find that it consists of broken and hilly prairie, the northern portion especially being high and in the Cypress Hills. White Mud River crosses the township by a circuitous course, connecting with Cypress Lake, the eastern end of which was crossed in Section 19. The river crosses the eastern line several times in Section 13 and flows close and parallel to the line in Section 24. This stream is fed from the north by several good sized creeks, one of which crosses the north in Section 31, and another in 33. Bush was found in the vicinity of the streams. A cart trail crosses the line in Section 31.—*E. Boivin*, 1884.
7. *Outlines.*—East, undulating prairie. In Sections 25 and 36 the surface is broken by hills and ravines. Pasturage is good everywhere. A creek crosses the line in Section 13.—*T. Fawcett*, 1882.
Sub-division.—Hilly, rolling and stony prairie, with a general surface of a black loam, gravelly and sandy soils, 5 to 8 inches deep, on a gravelly subsoil. Class 2. Not excellent for farming, but better adapted for grazing. Water is scarce. The only wood to be found consists of a few poplar bluffs of 2 to 10-inch trees, on the east boundaries of Sections 31, 4 and 9 and the north of 10. There is, however, considerable scrub in the several ravines of the township. In these ravines there are creeks flowing south. One crosses the western line four times in Section 18 and six times in 19, and leaves the township in Section 6. Another crosses the central portion of the township, from the north, in a valley which, in the northern half of the township, is over a mile wide.—*E. Boivin*, 1884.
8. *Outlines.*—North, Sections 33, 34, 35 and 36 are undulating prairie; 32 is a plateau, and 31 broken by hills and ravines. A large creek was crossed in Section 34, flowing south. East, undulating, hilly and stony prairie, broken by numerous ravines. Two branches of a creek were crossed in Section 13, and in 25 another creek.—*T. Fawcett*, 1882.
Sub-division.—Hilly, rolling and stony prairie, with a black and gravelly loam soil, 3 to 4 inches deep, on a gravelly and sandy subsoil, and not much adapted either for settlement or grazing, and even for the latter water is very scarce. There are brushies and thick willows of small dimensions along the third meridian, as well as a few patches along the fifth meridian, but of not much

value. Several small creeks in valleys cross the township. One of these is a continuation of the creek and valley described across the centre of Township 7.—*E. Boivin*, 1884.

9. *Outlines*.—North, prairie and bush; good pasturage.—*W. Chipman*, 1883.

West, hilly and broken, with numerous clumps of poplar. Several small creeks were crossed, the water being excellent. The soil is a good dark loam, but too stony for farming.—*A. F. Cotton*, 1883.

The south boundary lies on the top of the plateau, intersecting several streams and ravines which drain southwards, while a few hundred yards to the northward these streams wind their way to the north. The surface is nearly level; the soil a shallow loam, with gravelly clay underneath. Sections 1, 12 and 13 lie on the plateau. Going north, the remainder lies on the northern slope of the hills, and is densely wooded in a belt of timber, about six miles along the slope of the plateau, and an average width of two and a-half miles. The wood is principally poplar, and is of sufficient dimensions for ordinary building purposes. Eastward from this belt, as far as visible, the slope of the hill seems dotted with groves of poplar timber, but none of considerable extent. The height of the plateau is here over 400 feet, and the slope intersected by numerous spring creeks, most of which drain to a large lake appearing north-east. The soil throughout is dark loam, underlaid with gravel.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie. Soil, sandy loam of good quality, and excellent water. There is a large block of poplar timber in the township from 4 to 15 inches in diameter, suitable for building. The soil is good for farming, except that the land is rather rolling. Excellent pasturage everywhere.—*H. Kerr*, 1883.

10. *Outlines*.—West, rolling prairie, with some very pretty flats. The soil is a good sandy loam. Numerous squatters. Scrub on the west of Sections 6 and 7. Trails across 30 and 31.—*A. F. Cotton*, 1883.

East, in this township, the foot of the northern slope of the Cypress Hills occurs in Section 1. Sections 13 and 24 lie in a basin through which a rapid stream, 8 feet in width, runs. Like all streams from the Cypress Hills, it has a hard shingly or stony bed, with rapid current. Its western bank is wooded with dense willow, poplar, thorns and other scrub. The remainder of the township northwards is nearly level.—*T. Fawcett*, 1882.

Sub-division.—The greater part of this township is drained by Hay Creek and its numerous small tributaries, some of which run underground for long distances and again reappear. A range of hills divides Hay Creek to the west from Bear Creek to the east. There is scrub bush in many of the gullies to the south. A variety of soils occur, ranging from black loam to sand. A fair average township.—*W. Chipman*, 1883.

11. *Outlines*.—West, rolling and level prairie. The Canadian Pacific Railway and trail cross the township from Section 19 to 36. In

the north-west, between Hay Lake and the line, there are some low sandhills. The east is all rolling prairie. In Section 13 the Fort Walsh and Qu'Appelle trail was crossed.—*A. F. Cotton*, 1882.

Sub-division.—In the north-east corner, and west of Hay Lake, numerous small sandhills occur. South-easterly it is high, and broken by many gullies. Hay Lake is slightly alkaline, and covers the greater part of Sections 32, 33, 28 and 29, and small parts of 20 and 21. The land along Hay Creek appears to be well adapted for agriculture. Settlers have located on Sections 4 and 6. No wood. The Canadian Pacific Railway crosses the township south of Hay Lake.—*W. Chipman*, 1883.

- 12. Outlines**.—North, generally sandy, and not suitable for farming purposes, but will make fair grazing land. Water mostly alkaline.—*W. T. Thompson*, 1882.

West and east is gently-rolling prairie, with a few alkaline sloughs. The soil is a light sandy loam, and in the south-east pure sand.—*A. F. Cotton*, 1882.

Sub-division.—Mostly high and rolling. Soil, light sandy loam, except in the south-east corner, where it is pure sand. There are a few shallow alkaline sloughs in the north-west, but no fresh water. No wood. Along the southern sections there is a range of low sandhills.—*W. Chipman*, 1883.

- 13. Outlines**.—North and west, rolling and level prairie, with a light sandy loam soil.—*J. K. McLean*, 1882.

Along the south and east boundaries the land is sandy, and unsuitable for farming, but will make fair grazing land. Water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Rolling prairie. Soil, very sandy, with sub-soil of sand and gravel. Water is scarce and there is no wood.—*C. Desjardins*, 1883.

- 14. Outlines**.—Over the south and the west lines of this township the surface is rolling and the soil is sandy, sometimes mixed with loam and in other places pure sand. The western boundary runs into Big Stick Lake in Sections 30 and 31.—*J. K. McLean*, 1882.

East, broken prairie, with drifting sand and sandhills. Line runs into Big Stick Lake in Section 36.—*W. T. Thompson*, 1882.

Sub-division.—Big Stick Lake occupies the north-east corner, parts of 32 and 30, and the whole of 31. The water is salty. Sandhills cover the south-western quarter of the township. The remainder is a rolling prairie, with a light soil.—*C. Desjardins*, 1883.

- 15. Outlines**.—Surveyed the north and the west boundaries. The surface is generally very hilly. Big Stick Lake occupies much of the southern half of the township. South and west of the lake the soil is very light and sandy. North of it the soil gradually works out to a clay loam.—*J. K. McLean*, 1882.

Going south, on the eastern line, the surface is generally undulating, with some hilly portions. The southern half of this line falls entirely in Big Stick Lake, along the northern shore of which there are a few sandy points. There is an old cart trail north of the lake.—*T. Fawcett*, 1882.

Sub-division.—Rolling and undulating prairie. Soil, clay, of various mixtures. Generally class 2. Big Stick Lake covers and breaks a large number of Sections to the south-east. Its water is slightly alkaline, but may be used. Section 2, and portions of 1, 3 and 11, jut into the lake, and are composed of level prairie.—*C. C. DuBerger*, 1883.

- 16. Outlines.**—Going westward, on the north line, the clay soil is pretty well obscured by the sand driftings from the hills to the east. Vegetation, however, is luxuriant. Water very scarce. Going southward, on the eastern line, for the first four miles, the soil consists of a mixture of sand drifting from the sandhills to the east. In Section 12 the clay loam comes to the surface, and continues to Big Stick Lake, in Township 15. The surface is undulating throughout.—*T. Fawcett*, 1882.

West and south, rolling and hilly prairie. Surface water scarce.—*J. K. McLean*, 1882.

Sub-division —Surface generally rolling, but broken southwards. Sections 23, 24, 25 and 26 are broken by a lake of very salt water, and quantities of salt deposit are found along its shores. Fresh water is scarce throughout the township. Soil, generally, is second class.—*C. C. DuBerger*, 1883.

- 17. Outlines.**—West, fair land; rolling prairie. Soil, sandy loam, rated as second class. A range of knolls, in many places stony, runs through the centre of this township. Water very scarce; were obliged to dig wells to supply our wants. Very few marshes.—*J. Dudderidge*, 1882.

Starting southwards, on the eastern line, the surface is generally very undulating. The soil is a clay loam. A few of the hill tops are stony and the soil is mixed with gravel. A few fresh-water marshes were met with. Going west, on the southern boundary, the clay soil is pretty well coated with the sand driftings from the sandhills to the east. There is, however, a fair vegetation, but water is very scarce.—*T. Fawcett*, 1882.

Sub-division.—Undulating prairie. Soil, clay loam. Sandy loam and sandhills occur in the north and east parts, also a few stony and gravelly ridges. Good water is scarce, only a few ponds occurring; but it may be got anywhere by digging. There are some large alkaline ponds or lakes. The land, generally, is good and well suited for settlement.—*D. C. O'Keeffe*, 1883.

- 18. Outlines.**—North and west, fair land; rolling prairie. Soil, sandy loam. Second class. Water very scarce; very few marshes. A range of hills runs through the northern part of this township, close to the north line.—*J. Dudderidge*, 1882.

East, northwards the surface is very undulating. The soil is a clay loam, with clay subsoil. A few of the hill tops are stony, and soil is mixed with gravel. Several fresh-water marshes were met with near the line, in Sections 1 and 12.—*T. Fawcett*, 1882.

Sub-division.—Undulating prairie; some parts hilly with quartz and granite boulders and gravel. Soil, generally, clay, clay loam, also sandy loam, on clay and sand subsoils. Several lakes of alkaline water, but good surface water scarce. This township

will produce excellent crops under a favorable rainfall. No wood. *D. C. O'Keeffe*, 1883.

- 19. Outlines.**—Soil, very light. The eastern side of this township adjoins the sandhills. No lakes, or surface water of any kind, in the western or the southern portions of the township.—*J. Dudderidge*, 1882.

East, there are numerous small tracts of alkaline land, but in all other respects the country has a good appearance.—*E. Bray*, 1882.

Sub-division.—The greater part sandy and hilly, the three easterly tiers of sections being worthless. The western part contains considerable hard clay, and in places small areas of clay and sandy loam, on clay and sand subsoils. Some good water in the valleys, but not much. Occasional bluffs of scrub, willow and poplar and some cherry occur.—*D. C. O'Keeffe*, 1883.

- 20. Outlines.**—North, good rolling prairie, with arable soil. A range of hills crosses Section 33. Going south-east, there are sandhills one and a-half miles from the north-east corner, and thence sandhills alternate with sand prairie to the southern boundary of the township.—*E. Bray*, 1882.

Soil, very light. The eastern side of this township adjoins the sandhills, and a portion of the north-east corner is in them. No lakes or surface water of any kind. Westwards it is dry, rolling prairie. No surface water.—*J. Dudderidge*, 1882.

Sub-division.—Undulating prairie. Soils, clay, clay loam and sandy loam, on clay and sand subsoils. Good surface water scarce, but may be had by digging 15 or 20 feet. This land is of excellent quality, and well suited for settlement, and will produce good crops under a favorable rainfall. No wood. Sections 24, 13, 25 and 26 are very poor.—*D. C. O'Keeffe*, 1883.

- 21. Outlines.**—West, prairie. Trail to the Red Deer Forks crosses the line in Section 31. Water scarce. No wood.—*E. J. Rainboth*, 1882.

The south is good rolling prairie, with an arable soil. The west is also rolling prairie, with a few stony hills. The soil is of a fair quality. A range of hills crosses Section 4.—*E Bray*, 1882.

Sub-division.—This township is all rolling, and possesses various soils—clay, clay loam and sandy loam, underlaid with clay and sandy subsoils. Class 2. There are a few good water swamps. There is no growth of wood. This is a good township for settlement. A trail to the Forks of the Red Deer River crosses the northern portion of the township.—*D. C. O'Keeffe*, 1883.

- 22. Outlines.**—Surveyed the north and west boundaries. The surface is all gently-rolling prairie, with the exception of the north-west corner of the township, which is a little broken by some ravines running south from the Saskatchewan River. There is no permanent surface water, except a creek in one of these ravines and a marsh in the south-west corner. The soil is generally a fair clay, which is, to some extent, mixed with sand drifted from the sandhills to the west.—*E. J. Rainboth*, 1882.

The western side of the township is all rolling prairie, with the exception of a few stony hills. The soil is of fair quality. There is no surface water.—*B. Eray*, 1882.

Sub-division.—The surface of this township is undulating prairie, with a clayey soil on a clay subsoil, and class 2. It is fair land for producing crops under a favorable rainfall, and is suitable for settlement. Surface water is, however, very scarce, and there is no wood. A trail to the Red Deer Forks crosses the township east and west.—*D. C. O'Keeffe*, 1883.

- 23. Outlines**.—West, much of this portion of the township is broken by the valley of the Saskatchewan River, which, flowing westwards, enters the township on Section 18, where there is a quantity of timber on the north bank of the river. North of the valley of the river the surface is rolling prairie, with an arid clay soil. There is a creek of saline water in the south-west, which takes its rise in some hilly country in the township south of this, which flows along the western boundary, and, after crossing it several times, enters the main river.—*E. J. Rainboth*, 1882

The north-eastern part of this township is in the valley of the South Saskatchewan River. The river bed is only 16 chains wide, partly occupied by sand bars. Lignite was noticed in the sands. The land to the south of the river is undulating prairie, and improves from a second class, near the river, to first class quality in the vicinity of the south boundary.—*T. Kains*, 1882.

South, rolling prairie, with a clay soil. A creek was crossed in Section 6.—*E. J. Rainboth*, 1882.

Sub-division.—Is almost entirely a prairie township, the only timber being a few cottonwood trees, scattered along the banks of the river, and a few small groves of cherry in the ravines on either side. The South Saskatchewan River runs in a north-easterly direction through the township. On both sides, for the average distance of a little more than a mile, the country is very much broken by deep ravines, the sides of which are stony. The north-western, western, south and south-eastern portions are rolling prairie. The soil is clay, except near the river, where it becomes sandy. The South Saskatchewan crosses from Section 18 to 36, and the country, for an average distance of a mile on each side of the river is much broken by deep ravines. Cottonwood grows along the banks of the river, and small groves of cherry, &c., in the ravines. Back from the river, on either side, the country is rolling prairie. Soil, clay and clay loam. Classes 3 and 2. Nearer the river it is sandy.—*P. Burnet*, 1883.

- 24. Outlines**.—The north and the east consist of dry, undulating prairie. The soil is a clay and a clay loam, of classes 1 and 2. There are but few sloughs in which water may be found. The valley of the Saskatchewan River breaks in upon the south-east corner of the township. A couple of trails follow this side of the river.—*T. Kains*, 1882.

West, undulating prairie, with an arid, clay soil. Class 3. Trail to the Red Deer Forks crosses the line in Section 7.—*E. J. Rainboth*, 1882.

Sub-division.—Undulating. Soil, clay loam and clay, generally. Class 2, and well adapted for agriculture. The south-east corner is broken by ravines and stony knolls. No timber.—*P. Burnet*, 1883.

- 25.**—West, hilly and rolling prairie. East, gently-rolling prairie, and all ranked first class. The soil is a good sandy loam, with clay subsoil. Rather dry. A few hay marshes are visible.—*P. Belanger*, 1883.

The southern portion is undulating prairie, with a clay and clay loam soil, of first and second quality. There are occasional sloughs to be seen.—*T. Kains*, 1882.

Sub-division.—Is a good grazing township, and has numerous excellent grass swamps. Soil, sandy loam, with occasional strips of clay. Generally class 2. No wood.—*S. M. Starkey*, 1883.

- 26.** *Outlines.*—Generally gently-rolling prairie. The soil is sandy and clay loam with clay subsoil, and is very rich for farming purposes. Water is very scarce.—*P. Belanger*, 1883.

Sub-division.—Surface mostly hilly and rolling prairie, with here and there some level prairie. Soil, mostly a sandy loam, and scarcely up to class 2. The township is good for grazing, especially around the large swamps and lakes.—*S. M. Starkey*, 1883.

- 27.** *Outlines.*—This township is rolling prairie, and ranks first and second class. The soil is composed of clay and clay loam, and is well watered by numerous hay marshes. A trail from the Red Deer Forks to the Elbow of the Saskatchewan River crosses the township from the south-west to the north-east.—*P. R. A. Belanger*, 1883.

Undulating and rolling prairie. Soil, from a clay loam, southwards, to a sandy loam northwards. Mostly class 2. The township is well supplied with lakes and marshes, around which there is excellent grazing. A large lake breaks in upon Sections 1 and 2 from Township 28.—*T. Fawcett*, 1883.

- 28.** *Outlines.*—North, undulating and rolling prairie. Soil, clay loam, of 10 to 20 inches deep, stony in some places, but generally excellent soil for farming. In Sections 36 and 35 an alkaline lake, about a mile and a-half in length by half a mile in width, is traversed lengthways by the line. Southward from the lake, the surface is nearly level. In Section 32 there is a large coulée.—*T. Fawcett*, 1883.

All open prairie, and rolling somewhat heavily. The soil ranks first and second class, and is generally a clay loam, with numerous marshes. There is a small lake in Section 25, and from this there stretches a valley about 450 yards wide, the soil of which is alkaline, and in which there flows a creek in early spring.—*P. R. A. Belanger*, 1883.

- 29.** *Outlines.*—West, hilly prairie. Section 31 is rolling. The line crosses a marsh in Section 19 and a creek in 30.—*F. W. Wilkins*, 1884.

East, high and heavily-rolling prairie. No water.—*J. A. Maddock*, 1883.

Southwards, the soil is a good clay loam, and excellent for farming. The alkaline lake mentioned in the preceding township also breaks on Sections 1 and 2.—*T. Fawcett*, 1883.

- 30. Outlines.**—West, rolling prairie. In Section 18 a watercourse was crossed, and in Section 31 a saline valley.—*F. W. Wilkins*, 1884.

East, heavily-rolling prairie, and broken in the north-east. A large alkaline lake was crossed in Sections 24 and 25.—*J. A. Maddock*, 1883.

- 31. Outlines.**—This township is about one-half rolling and the other half hilly. A wide alkaline valley cuts up the south and eastern portions of the township. Some tracts of stony land were observed. Good water is plentiful. There is no wood of any kind. The soil is generally a clay loam, with some sand loam, and has been classed from 1 to 4. A trail to Battleford crosses the western portion.—*F. W. Wilkins*, 1884.

- 32. Outlines**—North, rolling prairie, with a soil of excellent quality, excepting some hard, dry clay in Section 31.—*E. Bray*, 1883.

Is principally rolling prairie, with a little hilliness in the western part. A large fresh-water marsh exists in the central part. Good water is abundant, but there is no timber of any kind. The soil is principally a clay loam, and was classed from 1 to 3.—*F. W. Wilkins*, 1884.

- 33. Outlines.**—South, soil excellent, excepting some hard, dry clay in Section 6. Surface, generally rolling.—*E. Bray*, 1883.

Is entirely rolling prairie, with a good deal of hummocky surface. A small creek or watercourse crosses from west to east. Good water is plentiful. There is no timber of any kind. The soil is principally clay loam, and classes 1 and 2.—*F. W. Wilkins*, 1884.

- 34. Outlines.**—Is mostly rolling, with some hilliness at the central part. Surface, hummocky in the southern part. Some stony land was seen. Good water is abundant. There is no timber of any kind. The soil varies from clay loam at the south to sand loam at the north, and has been classed mostly 1 and 2.—*F. W. Wilkins*, 1884.

- 35. Outlines.**—Is broken by hills and a deep coulée. The latter is from 80 to 100 feet deep, and crosses in a south-easterly direction in Sections 18 and 19, and contains ponds, sloughs and scattered stones, with some alkali in the water. The eastern and northern parts of the township are much more even, being undulating or rolling. The soil changes from a hard clay loam, in the lower portions, to loam and gravel in the broken part. Numerous sloughs are to be found in the south-west part of the township. The classification is from second to third.—*J. F. Garden*, 1883.

- 36. Outlines.**—North, rolling prairie. The alluvial soil is from 3 to 8 inches deep; the subsoil is clay. Second class. Along this line no water was seen.—*W. A. Ashe*, 1882.

Has an undulating or rolling surface, with a large quantity of flooded land in the northern part. The southern half is rather dry, except a large marsh on Section 7. An old cart trail crosses the north half. The soil is chiefly a hard clay loam, and first to second class.—*J. F. Garden, 1883.*

37. Outlines.—Has a rolling or undulating surface, except through its centre from east to west, which is traversed by a coulée measuring from 80 to 100 feet deep, containing sloughs and ponds. The soil is a dry clay loam, and from first to second class. There is a large wet area or shallow lake, which approximately covers Sections 25 and 26 and parts of 23 and 24.—*J. F. Garden, 1883.*

38. Outlines.—Has a high and somewhat broken surface, except in the south-west part, where it is undulating or rolling. A number of sloughs were found in the north and west, with some scattered stones. Stones also occur in small quantities over the western parts. The soil varies from loam, along the westerly boundary, to sandy loam in the east, and rates from second to third class, the higher grade being in the southern half.—*J. F. Garden, 1883.*

39. Outlines.—Has a high, rolling surface, with several small lakes and many ponds and sloughs in the south and west. Appearance of alkali was noticed, together with scattered stones, around the lakes. The soil varies from a light to a clay loam. The township rates from second to third class.—*J. F. Garden, 1883.*

40. Outlines.—North, the surface is quite hilly, and generally the soil is poor.—*G. B. Abrey, 1883.*

Very much broken in the northern and westerly portions by hills from 50 to 100 feet high. In the hollows between them there are a great number of ponds and sloughs. The soil is principally loam and gravel, with scattered stones on hills. This part rates from third to fourth class. The remainder is rolling or undulating, the soil being black loam to sandy, and second class.—*J. F. Garden, 1883.*

41. Outlines.—Very much broken by a series of hills and valleys, the latter containing salt lakes, some of considerable size. There is small poplar in bluffs on the hill sides and in some of the ravines. Class 3.—*H. B. Proudfoot, 1883.*

South, hilly prairie, and generally poor soil.—*G. B. Abrey.*

42. Outlines.—South half very much broken by a series of hills and valleys, the latter containing salt lakes—some of considerable size—and small poplar in bluffs on the hill sides. North half rough and hilly, with numerous ponds and grass swamps, and some scrub.—*H. B. Proudfoot, 1883.*

43. Outlines.—The eastern side is very hilly, with scrub on the northern slopes of the hills.—*J. K. McLean, 1883.*

The western side of the township is almost entirely bounded by Lake Manitou. The land in the vicinity of this lake was observed to be of excellent quality, being a deep clay loam. This lake is very picturesque, and its water is saline. It will be found

fully described in Township 44, Range 26. The sloughs adjoining the lake contain fresh water.—*J. F. Garden*, 1883.

44. *Outlines*.—North, rolling country. Soil is good. Clear-water ponds, many of them very large, are numerous along this line. A lake almost covers the east half of Section 31. Timber growing all along the line.—*W. A. Ashe*, 1883.

The east is very hilly. Thick bluffs of poplar, averaging 6 to 10 inches, extend south about two miles. Further south there is scrub on the northerly slope of hills.—*J. K. McLean*, 1883.

The southern portion of the western boundary is broken slightly by the western side of Lake Manitou. The land in the vicinity of the east of this lake was observed to be of excellent quality, being a deep clay loam. The lake will be found fully described in Township 44, Range 26.—*J. F. Garden*, 1883.

45. *Outlines*.—West, nearly the whole of this line is covered with a thick growth of poplar scrub. First class land.—*J. K. McLean*, 1883.

Thickly timbered with poplar in bluffs, some of the trees in which attain a size suitable for building purposes.—*H. B. Proudfoot*, 1883.

46. *Outlines*.—The land all along this line is first class, and generally covered with poplar scrub. Lakes and ponds, and small marshes, are plentiful along the southerly two-thirds of the line. The northerly strip of the township dips to the Battle River Valley. A river trail crosses the township.—*J. K. McLean*, 1883.

Surveyed the eastern boundary, and find it to be heavily rolling, with a soil which is of a very good quality for farming. A number of spring creeks cross in the small ravines, being tributaries to the Battle River. The country is thickly timbered with poplar, in bluffs. Some of the wood is of a good size. A cart trail crosses Section 12.—*H. B. Proudfoot*, 1883.

Sub-division.—Is hilly, and covered almost entirely with burnt timber and bush. The northern tier of sections lies on the slope of the south branch of the Battle River, and hence is much broken. The greater portions, however, of Sections 31, 32 and 33, lie on the river flat, and consist of unbroken prairie. Most of the timber has been burnt over, but is still standing. Green timber was also met with, generally poplar, below 8 inches in diameter. There is one large lake in the township, and portions of three others come within its limits. They all contain good water, except one, extending southward into Section 34, which is quite saline. The south-western portion contains a number of small lakes and ponds. The soil is generally a black loam, from 4 to 18 inches deep, with a clay subsoil, ranking first class. The fertility is amply attested by the luxuriant growth of grass on the open spots. A new cart trail runs diagonally through the southern half of the township.—*J. S. O'Dwyer*, 1884.

47. *Outlines*.—Going south, on the west boundary, this township is slightly rolling, with poplar bluffs and scrub for a short distance, when a prairie surface continues for the balance of the township.

Battle River is crossed in Section 7, and runs in a valley about 150 feet deep and one half-mile wide.—*J. K. McLean*, 1883.

Going south, on the eastern boundary, the north is slightly rolling, with poplar bluffs and willow scrub, and with numerous grass and willow swamps. From the south of Section 25 it becomes heavily-rolling and with a much less growth of wood. Here several small creeks cross to the river. The river leaves the township in the centre of Section 12, in a valley which is about half a mile wide. South of the river, on the top of the slope, there are a few bluffs of wood.—*H. B. Proudfoot*, 1883.

Sub-division.—Mostly level, with a black loamy soil on a clay and sand subsoil, and class 1. There is a belt of about two miles of bluffs of poplar along the north side of the township; the remainder is open prairie. Nearly all the ponds and lakes contain fresh water. The Battle River crosses the township, is about 200 feet broad, and can be forded anywhere (June), and has banks about 10 feet high, and covered with scrub, amongst which are scattered poplars. The valley is about half a mile wide; the top of the hill is 150 feet above the river.—*J. Burke*, 1884.

48. *Outlines*.—North, rolling and level. Soil, sandy loam, from 4 to 6 inches deep, with a sand subsoil. Classes 1 and 2. Numerous clumps of small poplar and willow. A cart trail from the telegraph line to Fort Pitt crosses the line in Section 33. A couple of sloughs and lakes were crossed in Sections 35 and 36, but none west of this.—*W. A. Ashe*, 1883.

The western side is slightly rolling, with poplar bluffs and scrub scattered about; more thickly, however, in the southerly half. There is abundance of surface water, and the land is first class for agriculture. The telegraph line and the Edmonton trail cross the line in Section 7.—*J. K. McLean*, 1883.

Rolling land, thickly wooded with poplar and willow in bluffs. Grass and willow swamps numerous.—*H. B. Proudfoot*, 1883.

Sub-division.—Is well supplied with wood for the immediate use of settlers. Every section, excepting a couple, has good bluffs of poplar, varying in size from 3 to 8 inches. The water is good and the land first class, the alluvial soil being a rich black loam, with a clay subsoil. The Edmonton trail and the telegraph line runs through the township. Ducks and prairie chickens are numerous.—*J. Burke*, 1884.

49. *Outlines*.—West, scrubby, with occasional bluffs of poplar. First class land. Big Gully Creek, which is about 15 links in width, and runs in a valley about 100 feet deep and one half-mile wide, crosses Section 30. East, the country is covered with poplar and willow scrub, and occasional poplar bluffs, the poplar averaging 8 inches in diameter. The land is first class. Big Gully Creek crosses in Section 24, and expands into a small lake on the boundary line.—*J. K. McLean*, 1883.

South, rolling and level. Soil, sandy loam, from 4 to 6 inches deep, with a sand subsoil. Classes 1 and 2. Numerous clumps of small poplars and willows.—*W. A. Ashe*, 1883.

- 50. Outlines.**—West and east, very hilly, with poplar scrub on the northerly slopes. Suitable for grazing. The water of the numerous ponds is usually fresh.—*J. K. McLean*, 1883.

Sub-division.—The surface is very much broken by high hills, from 100 to 150 feet in height, with deep valleys running in all directions. The soil is a good black loam, with yellow clay subsoil. This soil absorbs the moisture, leaving the ground hard, even after heavy rains. Poplar bluffs occur on the north side of many of the hills, but only heavy enough for fencing and fuel. The water is good in numerous small ponds and marshes. The grass, though short and scanty in many places, gives capital grazing.—*H. Carre*, 1884.

- 51. Outlines.**—The north part is hilly prairie, with brush on the slopes, and a few poplars near the river. The Saskatchewan River crosses the north-east in Section 36, where the banks are about 200 feet high. The soil is mostly a sandy loam, 6 to 10 inches deep, on a sandy, but sometimes on a clay subsoil, and classes 2 and 3. A trail passes out of the township in Section 33.—*W. R. Reilly*, 1884.

The country is here generally hilly, except the south-west part, which is rolling. The soil is good for only 2 to 4 inches—the subsoil being sand. The south part is somewhat stony. Bluffs of poplars and scrub willows are of rather small size, and are clearly scattered here and there. The part lying north-east of the river is much more heavily wooded. The Saskatchewan River crosses in Section 24, bearing south-east, and coming from the north, where it lies in Sections 36 and 25. The banks are about 170 feet high, and are generally wooded. Between Sections 30 and 19 the line crosses the edge of a lake, extending about four miles east and about one mile broad. Another large lake is crossed in Section 13, which is about two and a-half miles long, lies east and west, and is 25 to 30 chains wide. About two-thirds of this lake is in the township. The trail from Pitt to Battleford is crossed in Section 1.—*J. I. Dufresne*, 1884.

Sub-division.—The surface is divided into two portions by a range of very high and steep hills, ranging from 100 to 175 feet above the valleys and bottoms of deep ravines. Through the north-east corner flows the North Saskatchewan River, in a deep and wide valley, about 100 feet below the general level of the country. The south-west corner is broken and rolling. Numerous ponds and a few large lakes and high hills vary the surface of the country. Soil, a good black loam, from 5 to 10 inches deep, with yellow clay subsoil. Grass good for pasture, short and sweet, scarcely any hay land. A few detached clumps of small poplar, 5 to 6 inches in diameter, with large patches of scrub and willow thickets, are found. A large portion is unfit for cultivation, but is excellent grazing land.—*H. Carre*, 1884.

- 52. Outlines.**—North, owing to the line running very close to the Saskatchewan River, the country along it is of a hilly nature, with perhaps a larger proportion of sand than would be found further east, or away from the river's influence. The soil, though light,

is still adapted for farming purposes. The timber is in scattered bluffs.—*W. A. Ashe*, 1883.

The country is hilly and rolling. The soil is a light sand loam, varying from class 2 to 3. The northern part of this township contains poplar averaging 2 inches in diameter, with small openings of prairie. The remaining part is not so thickly wooded. The trail from Battleford to Fort Pitt is crossed in Section 18. The Saskatchewan River is crossed twice, first in Section 13 and then again in Section 12. It makes an elbow in the adjoining township. A belt of poplars, 5 to 12 chains wide, of larger growth, averaging 9 inches in diameter, borders each side of the river. In Sections 36 and 25 is met a creek 70 links, running to the Saskatchewan River. The banks of the river are about 60 feet high here.—*J. I. Dufresne*, 1884.

Sub-division.—Except in the sections adjoining the river, this township is not so hilly as the townships to the west, but the bluffs are more frequent and contain larger timber. The North Saskatchewan River enters the township in the north-west quarter of Section 33, and runs south-easterly; passing out in Section 13, but re-entering in Section 1, it runs south-westerly through that section. The south or right bank is very rough and broken, and slopes back from the river for an average distance of about one-third of a mile, when it reaches an elevation of 200 feet. With the exception of that portion in Section 33, this bank is well covered with poplar bluffs, which are suitable for fencing and rough building purposes. The north or left bank slopes gently back for about half a mile, being but little broken and only half the height of the opposite bank. The width of the river varies from 10 to 25 chains, and in early summer is navigable, but towards the fall sandbars appear almost daily, rendering navigation slow, difficult and tedious. The soil is principally a rich sandy loam, 10 inches deep, on a clay or sandy subsoil, and generally class 2. Beyond the river there is a plentiful supply of fresh water in the many ponds scattered about the township. A fine spring creek enters on the south-east quarter of Section 25 and crosses Section 24 into the river. The banks on either side are high, and afford an excellent opportunity for utilizing the water, which, in the dry time of the year, would probably give an overflow over a head of 8 feet wide by 6 inches deep.—*W. R. Reilly*, 1884.

53. *Outlines.*—The country here appears to be rolling, throughout the eastern part being so. The soil is poor in places, but still good sandy loam may occasionally be found. The Saskatchewan River enters Section 19, and after making a sharp curve in this section and part of Section 17, it then runs in a southerly direction. The banks of the river are about 150 feet high, and are very steep. Bluffs of poplar and scrub willows, together with few clumps of spruce, alternate with prairie in about equal proportion. Water appears in a good proportion. Quagmires and morasses appear here and there. A trail starting from Fort Pitt close to the river joins the trail to Carlton, which crosses Section 31.—*J. I. Dufresne*, 1884.

The southern line of this township runs very close to the Saskatchewan River, and the country is of a hilly nature, and more sandy than it is eastwards. The soil, though light, is still adapted for farming purposes. There are scattered bluffs of poplar.—*W. A. Ashe*, 1888.

- 54.** *Outlines.*—Rolling country, with a sandy loam soil, averaging class 2. This township appears to be entirely covered by wood, composed of poplars, averaging to 5 inches in diameter, and heavy underbrush.—*J. I. Dufresne*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXVI.

5. *Outlines.*—This township is all rolling prairie. On the eastern side there is some scrub in the north-east part, but there is no timber anywhere. A trail to Fort Walsh crosses from Section 13 to 31. A spring creek crosses the latter section, flowing to Cypress Lake.—*E. Boivin*, 1884.

6. *Outlines.*—West and east, the township is rolling and hilly prairie. Northwards, on the plateau of the hills, it is rolling prairie and stony land. A large portion of the central portion of the township is broken by Cypress Lake, which crosses Section 24 on the eastern side, and Sections 7 and 18 on the west. The northern portion of the township rises to the Cypress Hills, from which a number of spring creeks flow to the lake; the sections on the outlines of the township crossed by creeks being 25, 31 and 36. The land around the eastern end of the lake contains a good deal of scrub, and there is some timber along the northern line, but elsewhere no growth was observed. Cart trails cross Sections 24, 25 and 33.—*E. Boivin*, 1884.

Sub-division.—Rolling prairie and stony land, with a soil of black sandy loam, 3 to 8 inches deep, on a gravelly and clay subsoil. There are a few poplar bluffs on the eastern boundary and in the northern portion of Sections 25 to 36, inclusive. The trees are from 3 to 10 inches in diameter, and good for fencing and fuel, and a limited supply for building. The land, generally, is poor for farming, and neither is it good for grazing or the raising of stock as water is scarce, there being only a few creeks, which are very small. Trails enter the south-east corner of the township and branch north and west.—*E. Boivin*, 1884.

8. *Outlines.*—For description of the north boundary of this township, see report of south of No. 9, by *T. Fawcett*, 1882.

Sub-division.—Broken, heavy, rolling and stony prairie, with a black loam soil, 5 to 6 inches deep, on a clay, sandy and gravelly subsoil, little adapted for farming, except in places. The north-east and south-west corners contain fair but not excellent land. There is some valuable timber, particularly northwards, from 3 to 30 inches in diameter. This township is well adapted for the raising of stock.—*E. Boivin*, 1884.

9. *Outlines.*—West is very rough and hilly prairie. A few small clumps of poplar appear in the southerly portion. The soil is a good loam, but very stony. Creeks cross the line in Sections 6 and 18. A trail was crossed in Section 31. In the east the surface is hilly and broken, with numerous clumps of poplar. Several small creeks were crossed, the water being excellent. The soil is a good dark loam, but too stony for farming.—*A. F. Cotton*, 1883.

South, in Section 6, is the crest of the narrow plateau which forms the dividing watershed of the hills. The northern side is abrupt, and covered with poplar and spruce; the south appears more sloping. From Section 6 a grove of tall, straight spruce and pine, about 2 feet in diameter, appears about 20 chains south. In Section 5 the line dips into several deep ravines and re-ascends the plateau, which, at this point, rises 350 feet above the level of the plain at its base. These ravines are thickly wooded with second-growth spruce and pine, while underneath is a thick network of fallen timber, of considerable size, mostly spruce and pine. The line crosses Sections 4, 3 and 2 in a depression between two points of the plateau, which is again ascended in Section 1. Several streams were crossed in this depression. The largest in Section 3 forms a branch of Maple Creek.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie. Light soil for agriculture, but good pasturage. Maple Creek and a branch thereof traverse the township north and south, and are wooded with poplar along their whole courses. A number of the ravines are also wooded. The Fort Walsh trail crosses the western tier of sections.—*H. Kerr*, 1883.

- 10. Outlines.**—West, high rolling prairie. Soil, a good dark loam. A trail to Fort Walsh and Maple Creek crosses the line in Section 18. Crossing to the east it is rolling prairie, with some very pretty flats. The soil is a good sandy loam. Numerous squatters.—*A. F. Cotton*, 1883.

Sub-division.—Rolling prairie. The soil is generally a sandy loam, and excellent farming land. Maple Creek meanders through the township, flowing from the south to the north, and is entered in this course by several small branches. There is a fair supply of water throughout, and also in these creeks, which, however, dry up as the season advances. Maple Creek is wooded. The Fort Walsh and Maple Creek trail cross the township, bearing north and south. A number of settlers have located in the north and north-west quarter of the township.—*H. Kerr*, 1883.

- 11. Outlines.**—West, gently-rolling prairie. The soil north of Fish Creek, which here joins Maple Creek, is a light sandy loam and gravel. South of the creek it is a clay loam. Sage and cactus brush are very plentiful. There are numerous squatters in this township.—*A. F. Cotton*, 1883.

The Canadian Pacific Railway and two trails cross the west line in Section 19. Fish Creek crosses in 19 and 30. In the east, it is rolling and level prairie. The C. P. R. and trail cross the line in Section 24.—*A. F. Cotton*, 1883.

Sub-division.—Rolling prairie. Soil, sandy loam of excellent quality. Maple Creek traverses this township, and is partly wooded. The C. P. R. crosses east and west, and has a station (Maple Creek) on Section 15. A large number of farmers have taken up locations and made improvements in this township, and a considerable area is under crop. The Fort Walsh trail passes round the south-east quarter between Sections 12 and 4.—*H. Kerr*, 1883.

- 12. Outlines.**—North, land, generally, is sandy, but will make fair grazing land.—*W. T. Thompson*, 1882.

This township appears to be all rolling prairie, composed of a light sandy loam soil, with some gravelly parts. In the east there are a few alkaline sloughs, and there are a few very small sloughs in the south-west. Otherwise, water is very scarce.—*A. F. Cotton*, 1883.

South, prairie. Soil is an excellent sandy loam. Maple Creek was crossed in Section 5.—*H. Kerr*, 1883.

Sub-division.—Rolling prairie. Soil, generally, sandy loam of fair quality. Maple Creek traverses the township. There are a few marshes and ponds, but generally water is scarce. It is a fair township for settlement, and under a favorable rainfall will produce good crops. No wood.—*H. H. Robertson*, 1883.

- 13 Outlines.**—North, rolling and sandy prairie. The line crosses a creek in Section 33, and part of a lake, extending south, in 32. In the east it is rolling and level prairie.—*J. K. McLean*, 1882.

West, rolling and undulating prairie. No water.—*J. J. McArthur*, 1882.

South, rolling and undulating prairie, broken in places. Soil is light and sandy. Maple Creek crosses the line in Section 5.—*W. T. Thompson*, 1882.

Sub-division.—Undulating and rolling. Soil, sandy loam throughout, but of superior quality in the valley of Maple Creek, which contains good water and traverses the township in a circuitous manner. Section 21 is nearly covered by an alkaline lake.—*C. Desjardins*, 1883.

- 14. Outlines.**—Surveyed the north, south and east boundaries. The north is rolling and level, and the east and south are undulating. The soil consists generally of a light sandy loam, being lighter to the immediate south and west of Big Stick Lake, the south-west end of which almost entirely covers Sections 25 and 36. Maple Creek crosses Sections 4 and 5 and flows north-east to this lake, which is sometimes called Gull Lake.—*J. K. McLean*, 1882.

West, rolling prairie. Soil is light and sandy.—*J. J. McArthur*, 1882.

Sub-division.—Big Stick Lake covers parts of Sections 36 and 35, and Maple Creek crosses from Section 4 and empties into the lake. The land on either side of the lake is very good, but becomes light again at a short distance from the lake. A good part of the township, especially along Maple Creek, classes No. 1; the balance No. 2.—*C. Desjardins*, 1883.

- 15. Outlines.**—Rolling prairie in the west, and rolling, hilly and some level prairie in the east. The soil, which in the south-east is a light sandy loam, caused by driftings from the sandhills to the south, gradually changes to the north into a clay loam.—*J. K. McLean*, 1882.

Sub-division.—Surface generally rolling. Soil, generally class 2. Swamps, containing fresh water, are found in every part of the township. No wood. The south part of the township is level

and undulating. A long, narrow lake crosses Sections 3, 4 and 10.—*C. C. DuBerger*, 1883.

- 16. Outlines.**—On the north boundary the soil is a clay loam. Water is very scarce, as the drainage is very perfect, and towards Big Stick Lake. Surface generally rolling and undulating, with stony ridges and hilly prairie in Section 33. An alkaline lake in 34 and 35.—*T. Fawcett*, 1882.

This township is rolling and hilly prairie.—*J. K. McLean*, 1882.

Sub-division.—Rolling, very broken and stony. Approaching to the base line it becomes more level. Fresh-water swamps occur in large numbers throughout the township. Soil, a reddish clay; generally class 2.—*C. C. DuBerger*, 1883.

- 17. Outlines.**—Fair land; rolling prairie. Soil, sandy loam, rated as second class. A range of knolls, in many places stony, runs through the centre of the township. Water very scarce; very few marshes.—*J. Dudderidge*, 1882.

Southwards, the soil is clay loam. Fresh water is very scarce; there are some alkaline ponds in and about Section 3, and a very small creek crosses Section 6.—*T. Fawcett*, 1882.

Sub-division.—Dry, undulating and rolling prairie, with soils of strong clay loam and sandy loam, and subsoils of clay and sand. There is some limestone gravel, also quartz and granite boulders. Water scarce, but can be had by digging. Land, generally, is good, and will produce excellent grain, and is well adapted for settlement.—*D. C. O'Keeffe*, 1883.

- 18. Outlines.**—Surveyed the north, east and west boundaries. Fair land; rolling prairie. Soil, sandy loam, rated as second class. Water very scarce; very few marshes. A range of hills runs through the northern part of the township, close to the boundary line.—*J. Dudderidge*, 1882.

Sub-division.—Is undulating, rolling and hilly. Soil, clay and clay loam, on clay subsoil. Some quartz and granite boulders are occasionally found, and some gravel ridges. Good water may be had by digging for it 15 or 20 feet. The soil is generally class 2, and well adapted for agricultural purposes. No wood.—*D. C. O'Keeffe*, 1883.

- 19. Outlines.**—As the township appeared from the west, south and east boundaries, the soil was good, and mostly loam. There are a few alkaline marshes in the southern half, one large one being in Sections 7 and 18, and another in Section 4.—*J. Dudderidge*, 1882.

Sub-division.—Generally undulating prairie, and in some places rolling, with small hills. Soils, clay and clay loam, on a subsoil of clay, class 2, and very suitable for settlement and farming. Swamps, in general, have good water, but are scarce. Small areas of alkaline flats occur.—*D. C. O'Keeffe*, 1883.

- 20. Outlines.**—North, rolling prairie, with an arable soil.—*E. Bray*, 1882.

Rolling prairie. Soil, clay and sandy loam, with clay bottom in northern parts. The southern part is hilly, and better grazing than farming lands. Some surface water amongst the hills.—*J. Dudderidge*, 1882.

Sub-division.—Undulating prairie. Soil, clay loam and sandy loam on clay and sand subsoils. There is good water to be had in several localities. The township is suitable for settlement, and for the raising of grain and root crops; there is also some excellent pasture. No wood.—*D. C. O'Keeffe*, 1883.

- 21. Outlines.**—West, prairie. A large marsh was crossed in Section 30, which extends west and south from here. East, the surface is prairie. The trail to the Red Deer Forks crosses the line in Section 36.—*E. J. Rainboth*, 1882.

South, rolling prairie, with an arable soil.—*E. Bray*, 1882.

Sub-division.—Undulating prairie. Soil, part clay, part clay loam, on clay subsoil. Good water scarce, but there are several good swamps. The land is rated, generally, class 2, and is well adapted for settlement and the growing of grain, root crops, &c. No wood.—*D. C. O'Keeffe*, 1883.

- 22. Outlines.**—Starting west, on the north line, the line crosses obliquely the range of hills which bound the valley of the South Saskatchewan on the south side, and from which a number of coulées run into one main coulée. In this flows a creek of saline water towards the river. Proceeding further, several hills and ridges were crossed. Creeks cross in Sections 32, 33, 35 and 36. A small quantity of wood was observed in the western half of Section 31, where the soil is sandy. Down the west boundary the country is filled with low sandhills and drifting sand with a little brush. It improves to the south, where the prairie is rolling, with a few sloughs, and a clay soil—class 2—with a good growth of grass but no sod. The Red Deer trail crosses the northern part of the township.—*E. J. Rainboth*, 1882.

Sub-division.—Part rolling and undulating, and part hilly prairie. Soil, clay and clay loam on clay subsoil, except in Sections 34, 35 and 36, which are sandy, gravelly and stony hills and streams valleys. Several streams of good water pass into the north of the township. Surface water, scarce. No wood. A good township for settlement.—*D. C. O'Keeffe*, 1883.

- 23. Outlines.**—West, the Saskatchewan River was crossed in Sections 19 and 30. Cottonwood, with brulé and scrub, was found in the vicinity of the river. The country beyond it is rolling prairie.—*G. C. Rainboth*, 1882.

East, a creek of saline water, taking its rise in some hilly country in the north of Township 22, flows along this line, and after crossing it several times, enters the South Saskatchewan River, which passes across the township in a south-easterly direction, leaving on Section 13. The valley of the river on the south side expands southwards, and is filled with sandhills and drifting sand, with a little brush. The portion of the township north of the river is rolling prairie, with an arid clay soil. Class 3. A small quantity of timber was found near the river.—*E. J. Rainboth*, 1882.

Sub-division.—The South Saskatchewan River crosses the township from Section 30 to 13, causing a broken country for a mile inland and northwards, and half a mile inland and south-

wards. The northern portion of the township is fine rolling prairie, clay soil, and good farming land. South of the river is very rolling and sandy. The banks of the river are belted with heavy cottonwood timber and a thick undergrowth of cherry and white thorn.—*P. Burnet*, 1883.

- 24. Outlines.**—North, dry, undulating prairie. The soil is clay and clay loam of first and second quality, having but few sloughs in which water is to be found.—*T. Kains*, 1882.

West, undulating prairie; cactus plentiful, and the soil second class. An old trail crosses the line in Section 30.—*G. C. Rainboth*, 1882.

East, rolling prairie, arid clay soil. Class 3. Trail to the Red Deer Forks crosses the line in Section 12.—*E. J. Rainboth*, 1882.

Sub-division.—Rolling prairie. Soil, clay generally. Class 2, and well suited for agriculture. The south-west corner is slightly broken by stony knolls. No timber. The cart trail to the Red Deer Forks crosses Sections 1, 2, 3 and 4.—*P. Burnet*, 1883.

- 25. Outlines.**—Gently-rolling and first class prairie. The soil alternates between a clay, clay loam and a sandy loam soil, on a clay subsoil. There are a few hay marshes, and on Sections 18 and 19 there is a large marsh and alkaline flat. A chain of bluffs, from 20 to 50 feet high, running east and west, appears in the centre of the township.—*P. R. A. Belanger*, 1883.

South, dry, undulating prairie. Soil, clay and clay loam. Classes 1 and 2.—*T. Kains*, 1882.

Sub-division.—Level and undulating prairie. Soil, light clay on a clay subsoil, and generally poor farming land. Surface water is very scarce, and there is no wood.—*J. Bourgeois*, 1884.

- 26. Outlines.**—Gently-rolling prairie. Soil, first class—clay, clay loam and sandy loam with clay subsoil. A few hay marshes occur.—*P. R. A. Belanger*, 1883.

Sub-division.—Rolling prairie. Soil, sandy loam on a clay subsoil. Class 2. In the south-east portion of the township there are a few marshes. Some of the bottoms or low-lying places will make excellent farming lands. No wood.—*J. Bourgeois*, 1884.

- 27. Outlines.**—This township is rolling and undulating prairie, and ranks classes 1 and 2. The soil consists of clay and clay loam. Water appears to be very scarce, only a few insignificant marshes being crossed.—*P. R. A. Belanger*, 1883.

Sub-division.—Undulating prairie. Soil, clay loam on clay subsoil. Class 2. Two marshes occur in the north-west corner; but elsewhere surface water is scarce. The bottoms are excellent farming land. No wood.—*F. E. Brunelle*, 1884.

- 28. Outlines.**—Northwards, generally, rolling and, in places, hilly prairie. Soil, a clay loam, of from 10 to 16 inches deep. Class 2. Stony in places. A deep coulée and alkaline creek crosses Section 36. This is fed by smaller creeks, and is a stream about 25 feet in width, 12 inches in depth, with scarcely perceptible current, which winds its way down the valley towards the south-east. From the bank of the coulée, westward, the surface becomes quite hilly. The soil is good.—*T. Fawcett*, 1883.

The north-west half of this township is occupied by a range of sandhills, about 75 feet high. The soil in this part ranks 2nd and 3rd class. The south-east half is rolling prairie, and may be rated 1st and 2nd class, the soil being composed of clay and clay loam. Numerous hay marshes are also to be met with.—*P. Belanger*, 1883.

- 29. Outlines.**—Is inclined to hilliness over the greater portion of its area. At the north, however, it is rolling prairie. A small stream is found, having a south-easterly course, in the southern part. Good water is reasonably plentiful. No timber. All grades of soil are to be found, and classes 1 to 3.—*F. W. Wilkins*, 1883.

The southern portion of this township is quite hilly, and this hilly part is serrated by numerous small ravines which trend to a large coulée in the south-eastern corner, fully described in the north of Township 28.—*T. Fawcett*, 1883.

- 30. Outlines.**—This township is entirely rolling prairie. There is a deep alkaline valley, with a lake of a remarkable shape, near and along the northern boundary. Good water is not very plentiful or well distributed. There is no timber of any kind. The soil is a clay loam at the south, and becomes lighter towards the north, grading down from class 1 to 3. A trail from the forks of the Red Deer to Battleford crosses the township.—*F. W. Wilkins*, 1884.

- 31. Outlines.**—Is principally rolling, with a little hilliness at the south. The surface is hummocky in the eastern part. Good water is plentiful. No timber of any kind. The soil over the greater part is a clay loam. At the west side, however, some light loam is found. Classes 1 to 3.—*F. W. Wilkins*, 1884.

- 32. Outlines.**—North, hilly ground. The rich vegetation here shows that the soil is good, but on account of the extremely rough nature of the ground this township is better adapted for grazing than for any other purpose.—*E. Bray*, 1883.

Is principally rolling, with a little hilly land at the north. A saline valley exists in the west part. Good water is plentiful. No timber of any kind. The soil is principally clay loam, with some light sand loam at the south, and classes 1 to 3.—*F. W. Wilkins*, 1884.

- 33. Outlines.**—The eastern two-thirds part is rolling; the balance is hilly and knolly. Stones are plentiful in places in the hilly land. A large marsh occurs about the centre of the township. Good water is abundant. No timber of any kind. The soil is principally a clay loam, and very good. Classes 1 to 3.—*F. W. Wilkins*, 1884.

The south is hilly, with rich vegetation and good soil, but better adapted for grazing than for farming.—*E. Bray*, 1883.

- 34. Outlines.**—Is all rolling prairie. A large shallow marsh lies in the western part. Good water is abundant. No timber. The soil varies from clay loam to sand loam; also some hard clay soil was seen. Classed from 1 to 3.—*F. W. Wilkins*, 1884.

- 35. Outlines.**—Has a high surface, much broken by hills, ponds and sloughs. The soil is principally loam, with clay subsoil, and gravel on the ridges. Classification from first to third. The southern half of the township is a plateau, which is about 150 feet above the prairie to the north. In the north-east sections there is a conspicuous range of hills, and in Sections 24 and 31 there are lakes of considerable size.—*J. F. Garden, 1883.*
- 36. Outlines.**—Has a rolling or undulating surface, except in the southerly part, where the northern limit of the high land crosses it. A small lake crosses the west boundary in Section 19, and another lies across Sections 5, 6 and 7. A good deal of wet land borders the northern and north-eastern boundaries. Some few stones were observed. The soil is loam or clay loam, first to second class, and in places hummocky.—*J. F. Garden, 1883.*
- 37. Outlines.**—Southern part, rolling prairie land. The surface is much broken, and higher to the north, with high hills, ponds, ridges and sloughs. A deep coulée diagonally crosses the north half of the township. Good grazing in the bottom land of all this hilly country. The water in the small ponds, and the grasses, are both plentiful and good. Stones are numerous. The soil is clay loam to loam and gravel. First to third classes.—*J. F. Garden, 1883.*
- 38. Outlines.**—Rolling prairie in the south-east part. The remainder of the surface is hilly and broken, with large quantities of water in the hollows, and some gravel and stones on the ridges. A coulée, about 100 feet deep, with a long, narrow lake, crosses south-west. The soil varies from sandy loam to loam, with clay subsoil. Classification, from second to third. Good grazing,—*J. F. Garden, 1883.*
- 39. Outlines.**—High and rolling land, with easy slopes and a good deal of water in the small lakes, ponds or sloughs, about which good grass is luxuriant. A good many stones were noticed. The soil changes from clay to light clay loam, and is graded from second to third class. There is a fair sized lake on Sections 12 and 13.—*J. F. Garden, 1883.*
- 40. Outlines.**—North, prairie. The surface is quite hilly, and generally the soil is poor.—*G. B. Abrey, 1883.*
- Hilly and broken land in the easterly, and high and rolling in the westerly parts. A great many ponds, sloughs and stones are scattered over the surface, and in one or two places small lakes were seen. The grass is thick and good, making it well adapted for stock-raising. Classification, from second to third.—*J. F. Garden, 1883.*
- 41. Outlines.**—Even or rolling, and open in the southern parts, with light loam soil. Class 2. About two miles north there is a rough country, broken by coulées, sand ridges, sloughs and ponds, and thickly wooded with poplar clumps. Some of the trees are 12 inches in diameter. The valley of Eye Hill Creek runs across the north-west corner. The banks here are thickly covered with

willow bushes. The soil in the valley is very light and sandy, and classed between third and fourth.—*J. F. Garden*, 1883.

South, the surface is quite hilly, and generally the soil is poor.—*G. B. Abrey*, 1883.

42. Outlines.—The southern end of Manitou Lake extends into this township, crossing the northern boundary with a width of about two and a-half miles, and extending in wedge-like form to the centre of Section 12. This lake is entered by Ely Hill Creek, which enters the township by the south-west corner. The valley of the creek is very sandy, and the whole of the eastern portion of the township, south of the lake, is broken by sand ridges. Most parts are covered with poplars, many of them being of a large size. The west is rather broken and hilly. The water of the lake is very saline, and the township is, on the whole, not above class 4.—*J. F. Garden*, 1883.

43. Outlines.—Is almost entirely covered by Lake Manitou. The land adjoining its east bank was observed to be of excellent quality, being a deep clay loam.—*J. F. Garden*, 1883.

44. Outlines.—The north half has an even surface, thickly dotted with poplar clumps. The soil is a light loam; class 2. The south half of the township is covered by Lake Manitou. This lake is very picturesque and, in its main part has an average breadth, from east to west, of from 6 to 7 miles, extending north and south about 9 miles. Including the long, narrow inlets, it stretches from the south-east to the north-west about 18 miles. The banks vary in height from 80 to 130 feet, and are in many places thickly wooded. Several high islands were observed in the lake. The water is saline, but there is good water in the adjoining sloughs.—*J. F. Garden*, 1883.

45. Outlines—West, a creek flowing to Lake Manitou crosses Section 6. There are poplar bluffs and scrub all along the line; heavier in the north half. Surface water is plentiful; there is a large pond in Section 18 and a large marsh at the intersection of 30 and 31.—*H. B. Proudfoot*, 1883.

Nearly the whole of the east line is covered with a thick growth of poplar scrub. Soil, clay loam, and first class land.—*J. K. McLean*, 1883.

46. Outlines.—Along the western side of the township the surface is high, rolling and broken prairie and bush. The soil is composed of a black and a clay loam on a clay subsoil. There is plenty of timber for fencing and building. Vegetation is good, and the country is better suited for grazing than farming, as it is very broken.—*G. E. McMartin*, 1884.

The west is all rolling prairie, broken towards the north-west corner by the valley of the Battle River. There is some poplar and poplar scrub, and numbers of ponds and marshes. The soil is good and the vegetation luxuriant.—*H. B. Proudfoot*, 1883.

East, nearly the whole of this line is covered with a thick growth of poplar scrub. Section 36 is prairie. First class land.—*J. K. McLean*, 1883.

Sub-division.—Is generally hilly, and broken to the north by the outer banks of Battle River, and by deep ravines leading into the river. The soil is black loam, resting on a clay subsoil, and ranks first class. The timber has been burnt over, with the exception of a few patches, which are still alive. One large lake and several smaller ones supply the township with good water. It is well adapted for either farming or grazing, the soil producing a luxuriant growth of grass. The supply of water is sufficient, and there is an abundant quantity of wood for fuel and fencing. A large portion is open prairie. A new cart trail crosses a portion of the township from east to west.—*J. S. O'Dwyer, 1884.*

47. *Outlines.*—West, rolling, slightly hilly in places, but, on the whole, first class. Going south, on the east boundary, this township is slightly rolling, with poplar bluffs and scrub for a short distance, when prairie is reached, and continues for the balance of the township. Battle River was crossed in Section 12, and runs in a valley about 150 feet deep and one half mile wide.—*J. K. McLean, 1883.*

Sub-division.—Except in the valley of Battle River, this township is all rolling prairie. The soil of this rolling portion is all a good black loam on a clay and sandy subsoil. The river runs across the township from west to east, in the southern portion of the township. The immediate banks of the river are only about 10 feet high, but the valley itself is about 150 feet deep and about a mile wide. There are some bluffs of poplar along the river, but very little elsewhere. The water in the lakes and the ponds, which are scattered about the township, is good.—*J. Burke, 1884.*

48. *Outlines.*—North, level or slightly rolling. Soil is black and sandy loam, from 5 to 8 inches deep, with a sand subsoil. Classes 1 and 2. Willows and small poplars occur in bluffs. Several lakes and sloughs were crossed, and in Section 36 a couple of small brooks, dry in places.—*W. A. Ashe, 1883.*

The west is all prairie, rolling and slightly hilly in places, but, on the whole, first class. The east is slightly rolling, with poplar bluffs and scrub. First class agricultural land. The telegraph line and cart trail cross east and west.—*J. K. McLean, 1883.*

Sub-division.—Rolling prairie. Soil, class 1, is a black loam on a clay subsoil. The water in the lakes and ponds is generally good. A large lake—mostly covering Section 26 and part of 35—is well supplied with game, and the surrounding land supports a fine growth of hay.—*J. Burke, 1884.*

49. *Outlines.*—Big Gully crosses the northern boundary, and in it there lies some long narrow lakes with marshy edges. The surface is hilly and broken with scattered patches of poplar and and willow brush. The grass is short and sweet on the hills, but there is not much hay to be found except in the marshes.—*H. Carre, 1884.*

West, the land is first class, and covered with small scrub. On the east there is scrub, with occasional bluffs of poplar. First class land. Big Gully Creek, which is about 15 links in width,

and runs in a valley about 100 feet deep and one half mile wide, was crossed in Section 25.—*J. K. McLean*, 1883.

Sub-division.—The township is thickly covered with bluffs of small poplar and willows. The willows are, however, predominant, and the poplar is small and of little service, except for firewood and rails. Altogether, there is not so much timber in this township as in the one adjoining it to the west, viz.: Township 49, Range 27. The soil in this township is excellent, and throughout it ranks first class. The country is covered with a growth of luxuriant grass, and plenty of hay meadows, and will suit either farming or stock-raising. The township to the north is traversed by Big Gully Creek, which, in places, widens into lakes, one of which lies in this township. This creek is about 2½ feet deep, with a sluggish current, and banks averaging about 75 feet high.—*T. Drummond*, 1884.

South, level or slightly rolling, with a black and sandy loam soil. Classes 1 and 2. Willows and small poplars.—*W. A. Ashe*, 1883.

50. *Outlines.*—In the south-west there is small scrub. The land is first class, and continues so north to Big Gully Creek, in Sections 18 and 19. North of this creek the country is very hilly, with poplar scrub on the northerly slopes. The valley of the creek is marshy. In the east it is very hilly, with poplar scrub on the northerly slopes, and plenty of surface water.—*J. K. McLean*, 1883.

Sub-division.—The south and east halves are very much broken by high hills, deep valleys and ponds. The north-west quarter is more level. Soil, good black loam, 4 to 10 inches deep, overlying a fine yellow clay subsoil. Some small clumps of poplar from 4 to 5 inches in diameter, are scattered over the surface. Large patches of poplar and willow brush cover a good portion of the south half. The grass is short and sweet on the hills, but there is little or no hay to be found, except round the marshes. Water is plentiful and good, in large lakes, ponds, marshes and in Stony Creek, which flows, in a deep, wide valley, through the south-west corner.—*H. Carre*, 1884.

51. *Outlines.*—Is hilly prairie, with a good sandy loam soil, generally between classes 1 and 2. Bluffs of small poplars and scrub willows are numerous in places, but in general the country is pretty open. Water is plenty, and found in numerous lakes, ponds and marshes.—*J. I. Dufresne*, 1884.

Sub-division.—Presents a most rugged appearance, particularly Sections 15, 16, 17, 34, 35 and 36. The remainder is hilly, but the slopes are, in most instances, long and gradual, and not seriously objectionable to tillage. There are occasional bluffs of small poplar and brush suitable for fuel—and in Sections 8 and 17 some large enough for rough buildings. A remarkable feature is the situation of the bluffs, being with few exceptions, on the north side of the slopes, even where the south or sunny side is sheltered and the north exposed to the full sweep of the wind. This fact ought to be noted in any attempt at fruit or

forest culture. The soil is of fair quality, being a clay loam and a sandy loam, having a good growth of grass, and underlaid with subsoils of clay and sandy loams—generally good grazing land. Classes 2 and 3. Fresh water is abundant in the many lakes and ponds, which are, in some instances, surrounded with hay land. An old, but little used trail crosses from Sections 4 to 33.—*W. R. Reilly, 1884.*

- 52.]** *Outlines.*—Owing to the line running close to the Saskatchewan River, the country is of a hilly nature, with perhaps a larger proportion of sand than would be found further east, or away from the river's influence. The soil, though light, is still adapted for farming purposes. The timber is in scattered bluffs.—*W. A. Ashe, 1883.*

Rolling country, very suitable for agricultural purposes. The soil of the western part is far superior to that of the eastern part. The first consists of black loam, to a considerable depth, over a subsoil of clay, and is nearly everywhere class 1. The eastern part is sandy loam, sometimes as low as class 3. Within the south-west part there is a lake nearly two square miles in area. The eastern part is prairie, intersected by bluffs of small poplars and scrub willows, and on the western side good size poplars and white birch may be found. The lake is surrounded on the south and east by a belt 20 chains wide of large poplars, averaging 6 inches in diameter. A trail to Fort Pitt crosses Section 18. Water is fresh and abundant.—*J. I. Dufresne, 1884.*

Sub-division.—Presents a very rough appearance, especially Sections 1, 2, 3, 10, 11 and 12, which are beyond cultivation. The remainder of the township is hilly, but not entirely unfit for tillage. Bluffs of poplar and willow are scattered all over the township, particularly over the southern and north-eastern sections. In the many ravines of Sections 10 and 11 fire-killed wood may be found, which will serve for fuel. Along the slope, in the north of Sections 10, 11 and 12, there is a heavy growth of poplar and willow brush. The soil throughout is generally good, being about half clay loam and half sandy loam, having clay and sandy subsoils. There is an excellent growth of grass, and along and south of the valley extending across Sections 16, 15, 14 and 13 there is an abundance of wild pea and vetch vines. A beautiful fresh-water lake lies in the south-west quarter of the township, and numerous lakelets and ponds occur everywhere, all fresh and good. A trail crosses from Section 4 to Section 32, but it is little travelled. The Battleford and Fort Pitt trail runs diagonally across the north-west quarter of the township.—*W. R. Reilly, 1884.*

- 53.]** *Outlines.*—The country is rolling, and the soil varies from class 1½ to class 4. The Saskatchewan River crosses this township from Section 6 to Section 24. The banks of the river are about 150 feet high. The soil, south of the river, is of a good sandy loam. On the north side of the river it is also of a very fair quality, but further north is nearly all sand. This township is pretty thickly wooded, with occasional openings of prairie. In Section 19 the

line enters an old brulé, overgrown with poplar. This brulé continues through Sections 30 and 31. North of the river, scattered bluffs of spruce, averaging 10 inches in diameter, may be found. A coulée, 50 to 60 chains wide, and about 120 feet deep, crosses the township near the centre. This coulée lies north and south, and a little stream flows at the bottom and discharges itself into the Saskatchewan River. A trail from the Indian Reserve to Fort Pitt is met in Section 19. The trail from Fort Pitt to Carlton is crossed in Section 36. North of the river several quagmires and morasses are met with, principally in the north-east part.—*J. I. Dufresne, 1884.*

The south line runs close to the Saskatchewan River. The country is hilly, and the soil, though light, is still adapted for farming purposes. The timber is in scattered bluffs.—*W. A. Ashe, 1883.*

- 54** *Outlines.*—The country is gently-rolling, and the soil is a good sand loam, varying from class $1\frac{1}{2}$ to class 2. The western part is one-third covered by bluffs of poplars and scrub willows. The eastern part is entirely covered by wood. Two creeks, running good water, are respectively met in Sections 18 and 31, and one of them also crosses Section 1. An east and west line, forming the south boundary of an Indian Reserve, is met at 39 chains and 43 links from the south-west corner of the township. Water seems to exist in sufficient quantity. A trail from the Indian Reserve to Fort Pitt crosses Section 12.—*J. I. Dufresne, 1884.*

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXVII.

5. *Outlines.*—The surface is generally rolling prairie, except in the vicinity of Battle Creek, which crosses the township in a south-easterly direction, and is a fine stream of clear, fresh water. The surface of the country is generally very stony, and the soil is a gravelly, dry clay and sandy loam.—*J. G. Sing*, 1883.

This township, along the eastern boundary, is all rolling prairie. A cart trail to Fort Walsh crosses this line in Section 36.—*E. Boivin*, 1884.

6. *Outlines.*—Rolling prairie; the surface is very stony. The soil is gravelly, dry clay and sand loam. Battle Creek crosses the township in the south-west. It is a fine stream of clear, fresh water.—*J. G. Sing*, 1883.

The north is hilly and stony. The soil is sandy and gravelly loam. Creeks were crossed in Sections 2 and 3, and a trail in 4. In Sections 31, 32, 33, 34, 35 and 36 timber and scrub were found. The east is rolling and hilly prairie. Cypress Lake was crossed in Sections 12 and 13. A spring creek crosses the line in Section 36.—*E. Boivin*, 1884.

7. *Outlines.*—Surveyed the boundaries and sub-divided this township. The surface is generally heavily-rolling and undulating prairie. The alluvial soil is a black, gravelly and stony loam, from 4 inches deep, on a gravelly and sandy subsoil. The township is not well adapted for farming, but is fine for the raising of stock, owing to the abundant supply of water. In the western half of the township this is well distributed, in the shape of ponds and marshes and several large lakes. There are also several small creeks in the ravines. The only wood in the township is on the north boundaries of Sections 35 and 34, which is poplar, from 6 to 10 inches in diameter, also on the east boundary of Section 35, good enough for building, but in limited quantities. There is, however, a growth of scrub and small trees scattered all over the township. A cart trail to Fort Walsh crosses the southerly sections, bearing east and west, and is entered by several branch trails.—*E. Boivin*, 1884.

- *Outlines.*—North, hilly and rolling prairie, broken by ravines. The line crosses creeks in every section. Wood all along the line.—*T. Fawcett*, 1882.

In the west it is rolling and hilly prairie, stony in the ravines. In the east and south it is hilly and stony. The soil is clay, and gravelly and sandy loam. Wood was found along these lines, and in Section 24 two old timber camps. Several trails cross these lines.—*E. Boivin*, 1884

Sub-division.—Is rolling and hilly prairie. The soil is, for the most part, gravelly and sandy, with gravel and hard yellow

sand subsoil; it ranks 3rd and 4th class. In general, it is unfit for agricultural purposes, on account of its hilly nature and deep ravines, except in the south-eastern and south-western parts, where it turns to gently-rolling prairie. The grass is very poor on the hills, but improves towards the north. The township is well watered by creeks and pools of excellent fresh water.—*A. Bourgeault, 1884.*

9. *Outlines.*—Going north, on the west line, the first four miles are undulating, sloping to the north and rather stony. North of Fish Creek the soil changes to a very good sandy loam. One of the Fort Walsh trails crosses in Section 30. Over to the east, the surface is rough and hilly, particularly in the southern half; and in this portion there are a few small clumps of poplar. The soil is a good loam, but very stony. Very small creeks cross the line in Sections 1 and 13.—*A. F. Cotton, 1883.*

Eastwards, the surface is broken and ascending, and in Section 5 is Fish Creek, the banks of which are well lined with timber, chiefly of maple, scrub willow, and poplar. Several other streams occur on this line, which are also wooded with poplar and maple.—*T. Fawcett, 1882.*

Sub-division.—This township is broken and hilly. The soil is a clay, and a clay loam and gravel, class 2, and a good farming land. There are a few bluffs of poplar, willows &c., in Sections 1 to 5, 9, 10, 17 and 22 to 24. There are some settlers' improvements to be seen in the northern portion of the township. Several trails meet and cross this portion leading to Fort Walsh.—*H. H. Robertson, 1883.*

10. *Outlines.*—Hilly prairie westwards, with a few sloughs in the west centre. The soil is a sandy loam and gravel. The east is high, rolling prairie, possessing a good dark loam soil. The Fort Walsh and Maple Creek cart trail crosses the line in Section 13.—*A. F. Cotton, 1883.*

Sub-division.—Level and rolling prairie. Soil, sandy loam on sandy subsoil. Classes 1 and 2. In the east part, Fish Creek crosses the township in a northerly direction. There is some brush wood in Sections 35, 22, 23, 4 and 3, but only fit for fuel. It is good grazing land, although water is scarce. There is some good farming land also. From Section 4 the trail from Fort Walsh to Maple Creek crosses to Section 13.—*Robertson and Talbot, 1883.*

11. *Outlines.*—West, broken and heavy rolling prairie. Very little water.—*A. C. Talbot, 1882.*

East, gently-rolling prairie. The soil, north of Fish Creek, is a light sandy loam and gravel. South of the creek it becomes a clay loam. Sage and cactus brush are very plentiful. The Canadian Pacific Railway and two trails cross the line in Section 24. Fish Creek crosses in Sections 24 and 25.—*A. F. Cotton, 1883.*

Sub-division.—The general surface of the township is rolling and undulating. The soil is a sandy loam on a sandy subsoil, and class 2. The north-east corner is inclined to be hilly. There is no wood whatever, and the township is better adapted for grazing than farming. The C. P. R. crosses the north-east quarter, and a

station of the line is located in the township northwards, near the west end, and only a few chains off the north boundary of this township, which has been given the name of Kingarth. The trail to Maple Creek passes along the railway line and Fish Creek courses along the eastern sections.—*Robertson and Talbot*, 1883.

- 12. Outlines.**—North, rolling prairie. No water was seen along this line. Land, in general, is sandy, and not suitable for farming purposes, but will make fair grazing land.—*W. T. Thompson*, 1882.

West, rolling and broken prairie. The Canadian Pacific Railway crosses the line in Section 6.—*A. C. Talbot*, 1882.

East, rolling prairie. Soil, a light sandy loam and gravel.—*A. F. Colton*, 1883.

Sub-division.—Very similar to Township No. 11 of this Range; perhaps a shade better for farming, but more suitable for grazing. Water is scarce, but in this locality can be got in abundance by digging a few feet below the surface. The Canadian Pacific Railway crosses the south-west corner, and has Kingarth Station in that locality.—*P. C. Talbot*, 1883.

- 13. Outlines.**—The land in this township is high and, for the most part, undulating. An alkaline valley traverses the central part, from east to west. The land throughout is of a poor quality. There is no fresh water in this township.—*J. J. McArthur*, 1882.

The south is sandy, but will make fair grazing land. The surface consists of rolling prairie. No water.—*W. T. Thompson*, 1882.

Sub-division.—This township is all rolling prairie, and contains a light sandy loam soil, which is generally class 2. There is a clay flat, which is about a mile wide, bearing east and west through the middle of the township, in which there flows a sluggish creek. In portions of this flat, and nearly all along the creek, there is a clay loam soil, which is class 1. Throughout the township good water is scarce and there is no wood to be seen anywhere.—*C. Desjardins*, 1883.

- **Outlines.**—A range of sand hills, at the base of which are several alkaline ponds, extends through the south part of the township, from east to west. The remainder is high and very dry prairie. Soil, of an inferior quality, being light and sandy.—*J. J. McArthur*, 1882.

Sub-division.—An alkaline lake, about a mile long, lies between Sections 28 and 33. A belt of drifting sand, about one mile wide, runs through the southern part of the township. The remainder is a rolling prairie, with a light soil of sandy loam. Anywhere in the sand hills good water is obtainable by digging.—*C. Desjardins*, 1883.

- 15. Outlines.**—Throughout this township the land is high, dry and undulating. Soil, third class. On the west side there is a gradual slope to the south. No water.—*J. J. McArthur*, 1882.

Eastwards, it is very heavily-rolling prairie. Poor soil.—*J. K. McLean*, 1882.

Sub-division.—Level and undulating, except near the northern boundary, where the surface is rolling and broken. Soil, class 2. Water scarce. No wood.—*C. C. DuBerger*, 1883.

- 16. Outlines**.—North, the surface is hilly, with fresh-water marshes. The soil is clay loam, but on ridges is gravelly, while some of the hill sides are covered with stones and granite boulders.—*T. Fawcett*, 1882.

In this township the land is high and very undulating, with a few fresh-water marshes. The soil is third class.—*J. J. McArthur*, 1882.

East, rolling and hilly prairie —*J. K. McLean*, 1882.

Sub-division.—Rolling and very broken in the south part. Soil, class 2. Water scarce.—*C. C. DuBerger*, 1883.

- 17. Outlines**.—Fair land; rolling prairie. Soil, sandy loam, rated as second class. A range of knolls, in many places stony, runs through the centre of the township. Surface water very scarce; very few marshes, but water may be obtained by digging.—*J. Dudderidge*, 1882.

Southwards, the township is hilly, with some fresh-water marshes in the bottoms. These bottoms contain a clay loam soil, but the ridges are gravelly, with numbers of stones and boulders on the sides.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie. Soil, black loam, on a subsoil of sandy clay. A good agricultural township, and fairly supplied, with water in ponds and small marshes. There are no streams and no wood. A cart trail to the Red Deer Forks crosses the township.—*C. LeBer*, 1883.

- 18. Outlines**.—Surveyed the north, west and the east boundaries. Fair land; rolling prairie. Soil, sandy loam. Second-class. Water very scarce; very few marshes. A range of hills runs through the northern part of this township, close to the north boundary line. Sections 6, 7 and 18 are level prairie. The trail from Maple Creek to the Red Deer Forks passes here.—*J. Dudderidge*, 1882.

Sub-division.—Generally rolling prairie. Soil, sandy loam. Class 2. Subsoil, clay and sand, and in some places gravelly. The two easterly tiers of sections are more or less broken by small hills, generally stony and gravelly, and interspersed with ponds and marshes. Will make a fair agricultural township. No wood.—*C. LeBer*, 1883.

- 19. Outlines**.—Surveyed west, south and east. Good soil, mostly clay loam. A few alkaline marshes in the southern part, near the boundary line. The surface is either very slightly rolling or level.—*J. Dudderidge*, 1882.

Sub-division.—Rolling prairie. The north-east is more elevated and somewhat hilly, and the land slopes to the south-west. Soil, brown sandy loam, of 10 inches, on clay and gravel subsoil. Occasional fresh-water ponds and marshes occur, but good water is obtainable by digging a few feet. Is a fair agricultural township, if seasons are favorable, and not too dry.—*C. LeBer*, 1883.

- 20. Outlines**.—North, good rolling prairie, with an arable soil.—*E. Bray*, 1882.

Soil, clay and sandy loam, with clay bottom in northern parts. Southern part, hilly, and better grazing than farming lands. Some surface water amongst the hills. The surface westwards consists of rolling prairie, hilly and broken in places, while in the east it is all dry rolling prairie.—*J. Dudderidge*, 1882.

Sub-division.—Rolling prairie. The south consists of a ridge of hilly country for about two miles, and then the land slopes gently towards the north. In the centre of the township some level land is met with. Soil, brown sandy loam, of 10 inches, on clay and gravel subsoil. Only a few ponds occur, and water generally is scarce. The soil is good for farming, under a favorable rainfall.—*C. LeBer*, 1883.

- 21. Outlines.**—This township is undulating prairie. There is very little water. On Section 25 is an expanse of marsh, extending about three-quarters of a mile along the east line. This, in the month of October, was about 8 inches deep under water. The soil is clay, and class 2.—*E. J. Rainboth*, 1882.

Along the south boundary, rolling prairie. Alluvial soil, 3 to 4 inches deep, with sandy subsoil. Class 2. No wood or water.—*E. Bray*, 1882.

- 22. Outlines.**—In the north there are rolling sandhills of white sand. In the west the surface is undulating prairie, with a 2nd class soil. The Swift Current cart trail was crossed in Section 31.—*G. C. Rainboth*, 1882.

East, prairie, with sandhills in Section 36. The Red Deer trail crosses the line in Sections 25 and 36. Another trail crosses in the north half of Section 36.—*E. J. Rainboth*, 1882.

- 23. Outlines.**—The Saskatchewan River crosses this township presenting the usual characteristics of the river. Its course is first easterly to the south centre of the township, and then northwards to the north centre, from where it flows eastwards, leaving the township in Sections 24 and 25. There is heavy cottonwood timber, from 12 to 20 inches in diameter, on both banks of the river. This is intermingled with poplar and willow, which also grow on the islands. North and west of the river banks the country is undulating; south and south-east it is very sandy, and, in many places, nothing but drifting sandhills. In Section 6 there is trail to the Red Deer Crossing.—*G. C. Rainboth*, 1882.

- 24. Outlines.**—North, east half dry, undulating prairie. The soil is clay and clay loam, of 1st and 2nd quality, having but few sloughs in which water is to be found. There is a depression of an alkaline nature in Section 34, which extends west to Township 24, Range 28. This valley is about 100 feet below the surface of the adjoining prairie, and contains a lake some 3 miles from north to south, and nearly 2 miles wide. The bed of the lake is a dry alkali deposit. Several small streams flow into it, the waters of which are soon evaporated, though in spring time it may contain water. The Battleford trail passes on the west side of the lake.—*T. Kains*, 1882.

Along the western boundary, undulating prairie, broken by a few ravines on Sections 18 and 19. Soil, classes 2 and 3. Along the

eastern boundary—undulating prairie, except Section 1, where the surface is rolling. Alluvial soil, 6 inches ; sandy loam. Subsoil, clay for the first three miles going north, and from thence sand. It is rated class 2 throughout.—*G. C. Rainboth, 1882.*

5. *Outlines.*—Generally heavy-rolling prairie, ranked first and second class, with the exception of the south-west quarter, which is broken by ravines and a large alkaline lake. The soil is clay and clay loam. A few ponds and hay marshes are to be found, with excellent water. The Battleford trail passes northwards along the western tier of sections, after entering the township on Section 7. There is an alkaline flat and marsh near the centre of the eastern boundary.—*P. Belanger, 1883.*

Southerly, Sections 1, 2 and 3 consist of dry, undulating prairie, of clay and clay loam, classes 1 and 2, and having but few sloughs. An alkaline flat, in Section 3, extends west to Township 25, Range 28. It is about 100 feet below the surface of the adjoining prairie, and contains a lake some three miles from north to south, and nearly two miles wide. Several small streams flow into this lake in spring time. The Battleford trail passes on the west side of the lake.—*T. Kains, 1882.*

Sub-division.—This township is all rolling prairie. The soil is a sandy loam on a clay subsoil, will average class 2, and do very well for grazing. The western portion of the township is broken by a coulée running southwards to an alkaline lake which crosses the southern boundary and breaks upon the south-western sections to the extent of probably 1,500 acres. The coulée is flat and shallow, and about three miles broad at the south and one mile at the north. Several creeks pass through it, as also does the Battleford trail.—*J. Bourgeois, 1884.*

26. *Outlines.*—Undulating prairie, ranked first and second class, with the exception of Sections 6, 7 and 18, which are broken by ravines. The soil is clay and clay loam. A few ponds and hay marshes are to be found, with excellent water.—*P. Belanger, 1883.*

Sub-division.—Rolling and undulating prairie. Soil, sandy loam on a clay subsoil. Class 2. The south-west corner is cut up by a coulée. The Battleford trail crosses the township north and south. There is no water in the township, except in the coulée.—*J. Bourgeois, 1884.*

27. *Outlines.*—Is partly undulating and partly hilly prairie. The soil has been rated first, second and third class, and is either sandy loam, clay loam or clay. It is watered by several hay marshes, of which there is a large one in the centre of the township, measuring about two and a-half miles long by three-quarters of a mile broad. The Battleford trail crosses this range in a northerly and southerly direction. A belt of light sand occurs on the south boundary.—*P. Belanger, 1883.*

Sub-division.—Undulating, excepting the north-east corner, which is hilly. Soil, generally light clay, on clay subsoil. Class 2. A large hay marsh occupies the middle of the township. The Battleford trail crosses the township, bearing north and south, just west of the marsh.—*F. E. Brunelle, 1884.*

- 28. Outlines.**—Rolling prairie, stony in places. Soil, dark clay loam on clay subsoil. Class 1; fine for farming. A fair supply of surface water in marshes and ponds. In the east and south the land is more hilly and stony; but there is no wood. Excellent pasturage in the bottoms and around the marshes. The Battleford trail crosses the township.—*T. Fawcett*, 1882.

North of a diagonal line running from the south-west to the north-east the surface is all rolling prairie, and will rank first and second class. South of this line there is a small range of sandhills, and, in consequence, this portion of the township will rank from second to third class. Numerous hay marshes, with good water, are to be found in every portion of the township.—*P. R. A. Belanger*, 1883.

- 29. Outlines.**—Is all rolling prairie, inclined to hilliness at the north. There is a good deal of hummocky surface. A deep and narrow saline valley lies in the north-east of the township. There is some stony land. Good water is very plentiful, but there is no wood of any kind. The soil is generally a clay loam, and will class from 1 to 3.—*F. W. Wilkins*, 1884.

The southern portion of the township is all level prairie, with a good soil and good water.—*T. Fawcett*, 1883.

- 30. Outlines.**—This township is rolling at the north and is inclined to hilliness in the central portion. A deep and saline valley, which is also narrow, traverses the township from north to the south, containing salty lakelets and marshes. There is some stony land. Good water is plentiful, but there is no wood of any kind. The soil is generally a clay loam, and from first to third class.—*F. W. Wilkins*, 1884.

- 31. ¹ Outlines.**—Is rolling, principally, with some hilly land in the west part. Scattered stones are plentiful in the hilly part. A deep and narrow saline valley, with numerous lakelets, traverses the township from north to south. Good water is plentiful. No timber, other than some cherry bushes. Soil of all kinds, from clay to sand. Classes 1 to 4.—*F. W. Wilkins*, 1883.

- 32. ² Outlines.**—North, hilly ground. The rich vegetation here shows that the soil is good, but on account of the extremely rough nature of the ground this range is better adapted for grazing than for any other purpose.—*E. Bray*, 1883.

Is very hilly and broken over the north-west two-thirds of its area. The balance is rolling. A good deal of surface stone was seen in the hilly portion. A narrow saline valley lies in the south-west part. Good water is plentiful everywhere. There is no timber of any kind. The soil is a clay loam, principally, and very good. Classes 1 to 3.—*F. W. Wilkins*, 1884.

- 33. Outlines.**—The southern portion of this township has a splendid soil, with a luxuriant vegetation. Owing to the hilliness of the surface, however, it would not be convenient for farming, but is well adapted for the raising of stock.—*E. Bray*, 1883.

Is extremely hilly and broken throughout, with some very high gravelly ridges and knolls. The tops of the hills are inva-

riably stony. Good water everywhere, but no timber of any kind. Soil, principally clay and sand loams, and exceptionally good. Classes 2 to 3.—*F. W. Wilkins, 1884.*

34. Outlines.—Is very hilly and broken in the south-west half. The rest is rolling. Stones are plentiful in the hilly part. There is a large marsh at the foot of the hilly portion, and good water is abundant, but there is no timber. The soil is variable in composition, but in general is very good, and has been classed from 1 to 3.—*F. W. Wilkins, 1884.*

35. Outlines.—Has its surface much broken by hills and ridges, with a great number of ponds and sloughs in the hollows, the water in all of them being good. Quantities of field stones are also widely scattered. The soil is principally a loam, with clay subsoil. Good grass abounds in the hollows. Classification, from second to third. The watershed of the land is northwards.—*J. F. Garden, 1883.*

36. Outlines.—Undulating or rolling prairie on the east and north sides. On the south and west the land becomes high and broken. Section 19 is crossed by a coulée, from 60 to 80 feet deep, running east and west, and containing large ponds and sloughs; with appearance of alkali, and great numbers of the cactus plant. The easterly end of Cactus Lake—three or four miles long, by one-half to three-quarters of a mile broad, with shallow water—enters the township in the north-west corner. In the valley of this lake, and in that of another lake in Section 24, the cactus abounds. The soil varies from clay and clay loam in the east, to a sandy loam and stiff alkali and clay in the west, and is classed from first to second. The country descends by short steppes to the north.—*J. F. Garden, 1883.*

37. Outlines.—The easterly part is high, rough and broken, with plenty of water in the hollows, and some stone and gravel on the ridges. The soil is loam. Classes second to third. In the west the surface is undulating or rolling, and dry, the soil being here chiefly a light loam, with clay subsoil. Class first.—*J. F. Garden, 1883.*

38. Outlines.—Has, throughout, a high, rolling, and in some parts broken surface, with plenty of water in large ponds and sloughs, the grass being very luxuriant about them. A coulée, about 100 feet deep, runs from the south-east corner in a north-westerly direction, containing long, narrow lakes and ponds. Scattered stones were observed. The soil is clay or sandy loam, and is classed from second to third.—*J. F. Garden, 1883.*

39. Outlines.—Is broken in the westerly and northerly parts by Eye Hill Creek, a stream of good water running north-west to Lake Manitou. This creek is about 75 links wide and 3 feet deep, with a current of one and a-half miles per hour, bordered by sloughs and running in a valley, at this part of the course, about 80 feet deep. The east and south-east portion of the township is high and rolling, with ponds, sloughs and scattered stones. Loam soil. Classes to 2 to 3.—*J. F. Garden, 1883.*

40. *Outlines*.—North, is good, all-prairie, and somewhat rolling.—*G. B. Abrey*, 1883.

This township has a high rolling surface, composed of sandy and clay loam soils, which rates from classes 2 to 3. There are some small lakes, ponds and marshes in the east, north-west and northerly portions of the township. The south-west portion is very poor fourth class land, being composed of low sand ridges, with a scanty growth of choke-cherry bushes and thick ground cedars. Eye Hill Creek flows north through the central portion, and contains very good water.—*J. F. Garden*, 1883.

41. *Outlines*.—Has a high and rolling surface, with ponds, and hard clay soil in the south-west. It is thickly covered with poplar in the north and west. Eye Hill Creek passes through the eastern part. The northern portion is broken by sand ridges and knolls, and is class 4.—*J. F. Garden*, 1883.

South, good prairie; somewhat rolling.—*G. B. Abrey*, 1883.

42. *Outlines*.—Is broken sand ridges, many of them high and steep, running easterly and westerly. The south sides of these ridges are generally blown sand, without vegetation. The north side is usually thickly covered with poplar, ground cedar and scrub brush. The township is useless for agricultural purposes, but the wood is of value.—*J. F. Garden*, 1883.

43. *Outlines*.—Is nearly open, and is even or undulating in the north and west, with loam or clay loam soil. Class 2. The south and east parts are broken by sandhills and ridges, adjoining the lake. A large quantity of wood, principally poplar, grows on the south half. An arm of Manitou Lake enters the township on the south-east side. This arm is surrounded by wooded sandhills.—*J. F. Garden*, 1883.

44. *Outlines*.—Is hilly, and broken in the north and west parts, with a large quantity of poplars, up to 10 or 12 inches in diameter. The south-eastern portion, adjoining Manitou Lake, is sandy, and is also covered with poplar. The remainder of the township is comparatively open. The soil varies from a clay loam to sand, and classes from 2 to 4.—*J. F. Garden*, 1883.

45. *Outlines*.—The south-easterly portion of the township is rolling and undulating. The north-westerly portion is very much broken by large hills and deep valleys, which connect with the valley of the Battle River, which flows across the north-west corner. There is a large amount of scrub in the south-easterly portion.—*H. B. Proudfoot*, 1883.

Sub-division.—Is level, rolling and broken, and is composed of prairie and bush, the former predominating. It is broken by Battle River in the north-west corner, and by lakes and sloughs, which lead to the river. There is an abundance of good fresh water. Soil, principally black loam, of a good depth, with clay subsoil. There is an abundance of timber for fuel, fencing, &c., but no minerals. This township is well suited either for grazing or farming purposes, the grasses being long and thick, and from appearances in general, it can be rated as a second class township.—*G. E. MacMartin*, 1884.

46. *Outlines*.—Along the south boundary it is prairie, with very little scrub. The ground is very much broken by Battle River, which cuts the township diagonally, and by coulees running into the valley. There is only a small quantity of timber in the valley, scrub and willow predominating.—*H. B. Proudfoot*, 1883.

Sub-division.—Is high, rolling and broken prairie and bush. Is broken by Battle River, also by lakes, sloughs, and by numerous coulees, one of which traverses the entire township. The river traverses it in a north-easterly direction, and the high range of hills on either side make it very broken and uneven. Water is abundant and fresh in almost every section. The soil is composed of black and clay loams with a clay subsoil. There is plenty of timber for building, fencing, &c. No minerals were seen. It is suited for grazing, being too broken for farming. Vegetation is good, and the saskatoon berry is plentiful. May be ranked as second class.—*G. E. MacMartin*, 1884.

47. *Outlines*.—Surveyed the western boundary of this township. It is generally rolling prairie, in some portions heavily-rolling. There are large numbers of ponds and marshes. The Fort Pitt trail passes north, after entering the township by Section 6. There are small patches of scrub and poplar. The soil is classes 1 and 2.—*H. B. Proudfoot*, 1883.

East, prairie, rolling and slightly hilly in places, but on the whole first class.—*J. K. McLean*, 1883.

Sub-division.—Is level, rolling and broken prairie, with scattering clumps of willow and scrub. Is broken by lakes and numerous small sloughs. There is a good supply of fresh water. The soil is composed principally of black loam, of a fair depth, with a clay subsoil. The timber is small and suitable for fencing and fuel only. There are no minerals. It is well adapted for either farming or grazing purposes. Vegetation is good. It is rated as a 2nd class township.—*G. E. MacMartin*, 1884.

48. *Outlines*.—North, land is rolling. Soil is a black loam, about 12 inches deep, resting on a sand subsoil. Class 1. Surface is broken by numerous sloughs and ponds, and dotted with bluffs of poplar and willows.—*W. A. Ashe*, 1883.

The western side of the township is rolling prairie. There are small patches of scrub and poplar and a few large grass swamps and ponds. The soil will generally rate first and second class. A chain of small lakes crosses the western side of the township in Sections 7 and 18, and immediately south of these is the telegraph line and the Edmonton trail.—*H. B. Proudfoot*, 1883.

East, rolling, and slightly hilly in places. First class, generally.—*J. K. McLean*, 1883.

Sub-division.—Is very undulating and broken by lakelets and sloughs, surrounded with willows and dry poplar. The soil is generally first class. The Edmonton trail and telegraph run through it. The water in the lakes and sloughs is good.—*J. Burke*, 1884.

- 49. Outlines.**—This township is good agricultural country, class first, but overgrown with poplar and willow scrub.—*J. K. McLean*, 1883.

South, land is rolling. Soil is a deep black loam. Class 1. Numerous sloughs and ponds, and bluffs of poplar and willows.—*W. A. Ashe*, 1883.

Sub-division.—Thickly covered with bluffs of small poplar and willows. There are several bluffs from which good building timber could be taken out. The soil is of excellent quality, and ranks throughout as first class, with the following exceptions, *i. e.*, the east half of Section 7, and the west half of Section 8, which are second class. The country is covered with a luxuriant growth of grass, and it is also well watered with numerous ponds and lakes of good water, which makes the township very suitable either for farming or stock-raising, while the bluffs afford excellent shelter for stock. There are several lakes of some size, especially in the south-west corner, and none of which are alkaline. In fact, there is no alkali in the township.—*T. Drummond*, 1884.

- 50. Outlines.**—West, first class agricultural country, but overgrown with poplar and willow scrub. In the east the surface is covered with poplar and willow bluffs. The land is first class. This continues north to Big Gully Creek in Section 24. North of this creek, the country is very hilly, with poplar scrub on the north-erly slopes.—*J. K. McLean*, 1883.

Sub-division.—The general surface is undulating and rolling, broken by the valley of Stony Creek, which runs in the north-east corner, through a deep and wide valley, with hills ranging from 80 to 100 feet high. North of this valley the land is hilly, and broken by deep ravines. Soil, good black loam, overlying yellow clay and suitable for agricultural purposes. Large bluffs of dead and living poplar are scattered over the south and west sides. Very large patches of brush and willow cover one-half the area of the township. Numerous small ponds and marshes lie scattered over the surface, with a few large lakes in the southern part, in which the water is good and sweet. The grass is luxuriant, but there is very little good hay land to be found.—*H. Carre*, 1884.

- 51. Outlines.**—Is a rolling country, the western part of which is thickly covered with poplars, averaging 6 inches in diameter with small openings of prairie. The prairie openings are generally larger than the bluffs in the eastern part. Water is fresh and abundant in numerous lakes and ponds. The soil is mostly all first class, being very rich black loam.—*J. I. Dufresne*, 1884.

Sub-division.—Presents a rough and bluffy appearance. Big Gully Creek runs from Lake No. 5, Section 32, south-easterly through Section 29, where it is joined by a branch extending across Section 30 to the west, then through Sections 20, 17, 16, 9, 3 and 2. This creek has a very soft bottom, and can only be forded at a very few points. From Section 20 it runs through a valley about half a mile wide, the banks of which are rough and broken, and about 150 feet high. Bluffs of poplar and small brush are dotted here and there, but the largest ones are to be found in

Sections 5, 6, 21, 27 and 28. On Section 27 the poplar is dry and fire-killed. Altogether, the first settlers may obtain sufficient wood for fuel, fencing and rough buildings. The soil is generally a good sandy loam, intervening with clay loam, supporting good grass, and underlaid with a subsoil of clay and sand. Is generally class 2. A few small but good hay swamps occur. There is good water in all the swamps, ponds and lakes, and excellent water in the lakes in Sections 31 and 32, and in Big Gully Creek. An old trail enters the township in Section 6, and runs northerly out through Section 33, but is not much travelled now.—*W. R. Reilly*, 1883.

52. *Outlines*.—North, owing to the line running very close to the Saskatchewan River, the country is of a hilly nature, with perhaps a larger proportion of sand than would be found further east, or away from the river's influence. The soil, though light, is still adapted for farming purposes. The timber is in scattered bluffs. There is abundance of water.—*W. A. Ashe*, 1883.

Rolling prairie, one-third of which is covered by bluffs of poplars and scrub willows. Water is fresh, for the most part, in the numerous lakes and ponds of this township. The soil is first class black sandy loam.—*J. I. Dufresne*, 1884.

Sub-division.—Presents a less rugged appearance than that of the township to the south, being, for the most part, bluffly and rolling, with numerous lakes and ponds, and a few swamps. The clumps are composed of willow brush and poplar, which will afford only a limited supply of fuel. The greatest quantity lies along the south shore of Lake 8, in Section 15. Some of this wood is large enough for rough buildings. The north-westerly part of the township is hilly, but not rough, the slopes being gradual and capable of tillage. The soil is of good quality, mostly a clay loam, and better adapted for cultivation than the township adjoining southwards, but some parts are more suitable for grazing. There is an abundant supply of good water in ponds and lakes. Lake No. 4, in Section 18, appears to have been recently formed, as timber—apparently not more than two years dead—was standing in 10 feet of water (July). A trail to Fort Pitt, but little used, crosses from Section 4, also an old trail running westerly, but only traceable in places.—*W. R. Reilly*, 1884.

53. *Outlines*.—The Saskatchewan River crosses this township, bearing a south-east course. It enters in Section 24, and leaves in the northern part of Section 1. Bluffs are few on the south bank of the river. The banks are about one-third covered by poplars, averaging 4 inches in diameter. The country north of the river is prairie, with numerous bluffs of poplars and scrub willow. A few clumps of spruce, 8 to 12 inches in diameter, occur. The soil is a good sandy loam. In the rear of river, water is scarce.—*J. I. Dufresne* 1884.

The southern portion of the township is rough and uneven, owing to the vicinity of the Saskatchewan River. The soil is a sandy loam, and fairly adapted for farming.—*W. A. Ashe*, 1883.

- 51.** *Outlines.*—Rolling country, of a good sandy loam soil. This township is generally covered by scrub poplars and willows, with openings of prairie. Bluffs of large poplars and clumps of spruce are occasionally met with. The soil is a good sandy loam.—*J. I. Dufresne, 1884.*

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXVIII.

5. *Outlines.*—Rolling prairie. The surface is very stony. The soil is gravelly, dry clay and sand loam. Battle Creek crosses the township. It is a fine stream of clear fresh water.—*J. G. Sing*, 1883.
6. *Outlines.* Rolling prairie. The surface is very stony. The soil is gravelly, dry clay and sand loam. Battle Creek crosses the township in the south-east. It is a fine stream of clear fresh water.—*J. G. Sing*, 1883.

7. *Outlines.*—North, rolling and undulating prairie; hilly, gravelly and sandy. Creek beds were crossed in Sections 31, 32 and 36.—*A. Bourgeault*, 1884.

On the west several hills and ridges were crossed. Trails cross the line in Sections 18, 19 and 31, and creeks in 6 and 31. In Section 6, very near the line, is an artesian spring. In the vicinity of the creek, in Section 31, timber was found.—*T. Fawcett*, 1882.

In the east the country is hilly and stony. The soil, sandy and gravelly loam. A trail was crossed in Section 12, and a creek in 36. Bluffs of timber are dotted over the surface.—*E. Boivin*, 1884.

8. *Outlines.*—Along the northern and western boundaries of the township the surface ranges from gently-rolling to hilly prairie. Many portions are gravelly and sandy. Numbers of creeks from the hills cross these lines, but they are very small, and soon dry, the only one of any size being in Section 6. There is a lake in Section 18, and quite a number of marshes in 18, 19 and 30. There is no wood, except in Section 6. The Qu'Appelle and Fort Walsh trail crosses the township, from Sections 19 to 33.—*T. Fawcett*, 1882.

Sub-division.—Rolling and undulating prairie. The alluvial soil is chiefly gravel, with yellow sand subsoil. It is stony, and may be ranked second class. On account of it being high land, the grass is poor. The supply of water in the marshes is good. It is well suited for agricultural purposes. The land slopes to the north. Oats would do well.—*A. Bourgeault*, 1884.

9. *Outlines.*—West, surface very broken, but the land suitable for grazing purposes. South, numerous ravines and stony ridges, which afford good pasturage. Timber occurs in a few ravines.—*T. Fawcett*, 1882.

East boundary, going north, the first four miles are undulating prairie, sloping to the north, and rather stony. As soon as Fish Creek is crossed the soil changes to a very good sandy loam. The Fort Walsh trail was crossed in Section 25.—*A. F. Cotton*, 1883.

Sub-division.—Rolling prairie, broken by gullies. Soil, generally clay loam, and sandy and stony. There are several creeks crossing the township east and west, which dry as the season advances. One or two settlers have located here, and appear well satisfied with the land.—*E. Fafard*, 1883.

- 10. Outlines.**—West, surface less broken than Township 9 of this range. In Section 7 a well defined creek bed meanders north, until it finds its way through a high ridge of hills to the east, 250 feet high. The township presents a barren clay surface, indented by numerous deep ravines, draining towards the creek. Specimens of lignite and clay iron-stone are met with, and the hill sides literally sparkle with crystals of selenite. These occur in great quantities, and will doubtless become a source of value. In Section 19 there are several marshes, in 30 a pond, and in 31 another creek.—*T. Fawcett*, 1882.

East, hilly prairie, with a few sloughs. The soil is a sandy loam and gravel.—*A. F. Cotton*, 1883.

Sub-division.—Highly-rolling and undulating. Soil, sandy loam. Class 2. Sections 27, 28, 33 and 34 are strong clay, class 1, and level. A lake occurs on Sections 1, 2, 11 and 12, in which the water is fresh; but generally water is scarce elsewhere as the season advances. A small branch of Maple Creek crosses the north-west half of the township.—*E. Fafard*, 1883.

- 11. Outlines.**—The west is very rolling and stony. In Section 18 Box Alder Creek was crossed. Water may be found in marshes and ponds.—*T. Fawcett*, 1882.

Along the east it is broken and hilly prairie, with very little water.—*A. C. Talbot*, 1882.

Sub-division.—This township is highly rolling and undulating, except along the eastern tier of sections, where it is gently-rolling. Soil, sandy loam, with a somewhat stony surface. Class 2. Box Alder Creek—dry in summer—enters on Section 19 and leaves on Section 5. A few ponds and marshes occur, but generally water is scarce. A good sized marsh was crossed in Section 35, and a large space of marshy ground in 19.—*E. Fafard*, 1883.

- 12. Outlines.**—North, land in general is sandy, and not suitable for farming purposes, but will make fair grazing land. Water scarce. *W. T. Thompson*, 1882.

West, hilly and rolling. Soil, a poor sandy loam. Creeks cross the line in Sections 7 and 18. The Canadian Pacific Railway crosses in 31.—*T. Fawcett*, 1882.

The east is rolling with a sandy loam soil. In Sections 24 and 25 it is very rolling and broken. The Canadian Pacific Railway crosses the line in Section 1.—*A. C. Talbot*, 1882.

South, hilly and rolling prairie. Water in Section 2, but scarce.—*E. Fafard*, 1883.

Sub-division.—This township is rolling in some portions, and occasionally there are hilly localities. The soil is a sandy loam, and will not grade over class 3. There is a lake on Sections 2 and 3. There is no wood. The Canadian Pacific Railway crosses the township from the south-east to the north-west corners and

near the latter end there is the station of Forbes. The country will generally make good grazing land.—*H. H. Robertson*, 1883.

13. *Outlines*.—Surveyed the western and southern boundaries. The soil is a light sandy loam and not suitable for farming purposes. The grass is, however, fair, and it will answer for the raising of stock. There is no surface water in the south, and that in the west is alkaline. Big Salt Lake was crossed in Section 31.—*W. T. Thompson*, 1882.

The most part of this township is high and undulating, with soil of an inferior quality. An alkaline valley, in which there are alkaline ponds, and which is about one mile in width, extends through the south part of the township from east to west.—*J. J. McArthur*, 1882.

Sub-division.—Big Salt Lake stretches from Section 14 to 31, and lies in a very flat country. The surface is part rolling, but much of it is hilly. Soil, in parts clay, clay loam, and in most parts sandy loam. Class 3. The more hilly parts are stony and gravelly.—*C. Desjardins*, 1883.

14. *Outlines*.—A range of sandhills runs along the south boundary of this township. The remainder is high, undulating and very dry prairie. Soil, a shallow sandy loam, with clay subsoil. The north is rolling prairie, and stony on the tops of the hills.—*J. J. McArthur*, 1882.

West, sandy, and poor for farming purposes, but will make fair grazing land. Water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—A belt, of over one mile wide of sandhills runs through the southern part of the township. The remainder of the township is rolling prairie, with light soil of a sandy loam. Water is very scarce, but may be got at a few feet in any part.—*C. Desjardins*, 1883.

15. *Outlines*.—The north part of this township is high, broken prairie. The remainder is dry, hard and comparatively level, and slopes to the south. The east is high and undulating, with a gradual slope to the south. No surface water on either lines, except in Section 31.—*J. J. McArthur*, 1882.

West, surface undulating and hilly. The soil is a clay loam, with stony hills and gravelly ridges. Water in several small lakes is brackish.—*T. Fawcett*, 1882.

Sub-division.—In the south-east part, undulating; over the remainder, rolling. Soil, a reddish clay; class 2. Water in the north, fresh. Sections 30 and 19 are broken by a lake, which is slightly alkaline, but may be used. In the north there is a large marshy pond in Section 31, and southwards there is another, which covers much of Section 3. In the south the elevations are stony.—*C. C. DuBerger*, 1883.

16. *Outlines*.—The north is rolling, hilly and undulating. In the west half of Section 36 is a level plateau. The west is also undulating and hilly. The soil, both north and west, is a clay loam, with stony hills and gravelly ridges. Several fresh-water marshes were crossed.—*T. Fawcett*, 1882.

The general character of this township is high and undulating. The soil, which is a shallow sandy loam, with clay subsoil, is very dry and hard.—*J. J. McArthur*, 1882.

Sub-division.—This township is all rolling prairie. The soil is a mixed clay on a clay subsoil, and generally class 2. Fresh water was found in good quantities, and it is fair land for settlement. There is no growth of wood.—*C. C. DuBerger*, 1883.

- 17** *Outlines*.—Going southwards, on the western boundary, the surface is undulating and the soil is a clay loam, suitable for agricultural purposes. Towards the south, and along that line, the surface is inclined to be hilly, with stone and gravel on the elevations. The soil is a clay loam. Several fresh-water marshes were crossed. There is a lakelet or pond on Section 7.—*T. Fawcett*, 1882.

Fair land; rolling prairie. Soil, sandy loam, rated as second class. A range of knolls, in many places stony, runs through the centre of the township. Water very scarce. Were obliged to dig wells to supply our wants. Very few marshes.—*J. Dudderidge*, 1882.

Sub-division.—Rolling prairie. Soil, a brown sandy loam, 6 to 14 inches deep, on a subsoil of white clay or clay and sand. This is a good agricultural township, with the exception of a few ridges, where it is stony. Some sheets of alkaline water were found, but, by digging 10 or 12 feet, abundance of good water may be got. There is an apparent drought in this part of the North-West. No wood.—*C. LeBer*, 1883.

- 18** *Outlines*.—The north consists of fair land, rolling prairie. Soil, sandy loam, rated as second class. Water very scarce; very few marshes. A range of hills runs through the northern part of this township, close to the north boundary. The east is hilly and broken; level towards the south.—*J. Dudderidge*, 1882.

The west boundary passes over undulating surface. Soil, clay loam, suitable for agricultural purposes.—*T. Fawcett*, 1882.

Sub-division.—The north of this township is very rough and broken, traversed by ranges of knolls and hills from east to west; and is best suited for grazing purposes, as the bottoms contain good land, water and excellent grass. The southerly four tiers of sections consist of rolling prairie, of a brown, sandy loam, 6 to 14 inches deep, on a white clay subsoil. This part is good for settlement, but suffers if the season is at all dry, which often occurs.—*C. LeBer*, 1883.

- 19** *Outlines*.—West, open, rolling prairie, with fair soil of sandy loam.—*E. Bray*, 1882.

This township is generally rolling prairie. Light soil. No water or marshes. In the south-west, in Section 6, the trail from Fort Walsh to the Red Deer Forks was crossed. The east is dry and level prairie, and in the south-east is the Maple Creek trail.—*J. Dudderidge*, 1882.

Sub-division.—Rolling prairie, sloping gently towards the north. The south part, for a mile and a-half to two miles, is composed of the same range of hills which appear in the north part of

No. 18 of this range. Soil is a brown, sandy loam, of 10 to 12 inches deep. Classes 1 and 2, grading from the bottoms to the higher levels. Water, scarce. No wood. The summer fall of rain in this section is reported to be too slight. The cart trail from Fort Walsh to the Red Deer Forks, and the trail from Maple Creek to the Forks, cross the township.—*C. LeBer*, 1883.

- 20.** *Outlines.*—Going west, on the north boundary, first two sections are good land. Third and fourth are sandy; fifth and sixth sections are drifting sand. Going south, on the west boundary, first three and a-half sections are mostly composed of drifting sand; the remainder is open, rolling prairie, with a fair soil of sandy loam.—*E. Bray*, 1882.

This township is rolling prairie. Light soil. No water or marshes. The north-west corner of this township is sandy, and adjoins the sandhills. The east is dry, rolling prairie, hilly and broken in places.—*J. Dudderidge*, 1882.

Sub-division.—Rolling prairie, rising towards the north. In the south part the soil is a sandy loam, about 12 inches deep, on a subsoil of sand and clay; good for agricultural purposes. The north, and particularly the north-west, is very sandy, and contains some clumps of cherry trees, but is otherwise useless. Water is scarce, but is good and fresh.—*C. LeBer*, 1883.

- 21.** *Outlines.*—Going north, on the west boundary, the first two and a half miles are drifting sandy land. The remainder is rolling prairie, with only fair soil. Along the southern boundary, Sections 1 and 2 are good land, 3 and 4 are a light sandy loam, and 5 and 6 are nothing but drifting sand.—*E. Bray*, 1882.

The east of this township is undulating prairie. The soil is 2nd class. There is very little water along this line.—*G. C. Rainboth*, 1882.

- 22.** *Outlines.*—West, rolling prairie, with only fair soil, which extends to south bank of Saskatchewan River, in Section 31. The river here has the same general features that characterize it elsewhere—high and rough cut banks, with deep lateral ravines, and averaging between 28 to 40 chains in width, including sand bars.—*E. Bray*, 1882.

North, undulating prairie. In Section 31 a trail crosses the line, and in the extreme west the South Saskatchewan River. A small creek was also crossed in this section. Going over the eastern line the surface was found to be undulating prairie, with a second class soil. The Swift Current cart trail crosses from Section 36 to Section 34. Poor farming soil.—*G. C. Rainboth*, 1882.

- 23.** *Outlines.*—The western part of the township is broken by the Red Deer River, which enters at the south-west corner and again crosses and re-crosses the western line. The soil is a fair sandy loam. The valley of the Red Deer River, in Section 18, contains some balm of Gilead and poplar of fair size. The boundary terminates on the north side of the Red Deer River, about a quarter of a mile west, where it joins the waters of the South Saskatchewan.—*T. Kains*, 1882.

The east is undulating prairie. The soil is mostly second class. The trail to the Red Deer Crossing was crossed in Section 1. The line crosses the South Saskatchewan River in Section 12. Heavy cottonwood timber, from 12 to 20 inches diameter, was found on both banks of the river. Poplar and willow bush was found on the islands and on the river banks. The south is undulating prairie. The Swift Current Creek trail was crossed in Section 2. In Section 5 a creek, a trail and the South Saskatchewan River cross the line.—*G. C. Rainboth, 1882.*

- 24. Outlines.**—Going west, on the north line, a depression of an alkaline nature extends as far as Section 35. After crossing this valley the country becomes rather broken and hilly, with numerous ponds, ravines and swamps for the remainder of line. The west part of township has a 1st and 2nd class soil, and the country is rolling, with gravel and stony ridges and grass swamps, but it improves approaching the valley of the Red Deer River.—*T. Kains, 1882.*

The east is undulating prairie. The soil is 2nd and 3rd class. An old trail crosses the line in Section 12.—*G. C. Rainboth, 1882.*

- 25. Outlines.**—Is hilly and broken by ravines on the east side. The soil has been rated 3rd class on the east boundary, on account of the roughness of the ground. However, in general, it may be considered 2nd class, as it is a fair sandy loam, with ponds and some springs of fresh water. The Battleford trail is crossed in Section 12.—*P. Belanger, 1883.*

The trail from the Red Deer Forks to Battleford crosses Section 1. West of this there is an alkaline valley. The country along the south is rather broken and hilly, with numerous ponds and swamps. The soil will grade about second class all round.—*T. Kains, 1882.*

Sub-division.—Rolling and hilly prairie, with a second class soil, being composed of sandy loam and clay subsoil. Some part of the subsoil is sand and gravel. The township is good for grazing. The east part is broken by the bank of a coulée running south to an alkaline lake. In the south part there are a few coulées, with very small poplars growing in them; also some willows.—*J. Bourgeois, 1884.*

- 26. Outlines.**—West, rolling and undulating; hilly and stony in places, but generally good land; clay loam. Class 1, and well watered. The lakes are usually alkaline, one of which, on Sections 31 and 32, is large. An old cart trail was crossed in Section 6. In Section 30 the line crosses two small creeks.—*T. Fawcett, 1882.*

Hilly, and broken by ravines on the east side. The soil has been rated third class on the east boundary, on account of the roughness of the ground. However, in general, it may be considered second class, being a fair sandy loam, with ponds and some springs of fresh water.—*P. Belanger, 1883.*

Sub-division.—Rolling prairie. Classes 2 and 3, being composed of one part of sandy loam and clay subsoil, and the other part sand. The north part is covered with brush, and there are two alkaline lakes in the north-west. The township is a poor one.—*J. Bourgeois, 1884.*

27. Outlines.—Ranks 2nd and 3rd class. Its soil is sandy, and rather light in many places. A few hay marshes are to be found, with good water. A group of ponds occur in the centre of the township, but they all appear to be alkaline, to judge by the white deposit around on the shore.—*P. Belanger*, 1883.

28. Outlines.—As seen from its eastern boundary, this township is all rolling prairie, and may be ranked as first and second class. The soil is a clay and a clay loam, with many hay marshes.—*P. R. A. Belanger*, 1883.

The northern portion of this township is undulating and rolling prairie, well dotted with marshes and lakes. The soil is a clay loam, and classes 1 and 2; it is fair farming land. Some clumps of sage bush occur, but there is no large wood. A large alkaline lake occupies the north-east corner of the township, and there are many smaller ones, and marshes, abounding along the easterly tiers of sections. To the south-east the valleys are level and alkaline, and the soil is class 2, which grade includes places which are stony and have boulders.—*T. Fawcett*, 1883.

29. Outlines.—Is in general rolling prairie, inclined to hilliness in the central and northern portion. A good sized alkaline lake exists in the north-west angle, and there are numerous alkaline ponds throughout the northern portion. Good water is everywhere plentiful, but there is no timber. The soil is generally good—principally clay loam. Classes from 1 to 3.—*F. W. Wilkins*, 1884.

Comparatively level prairie along the south boundary. Soil, good, with a considerable quantity of good water.—*T. Fawcett*, 1883.

30. Outlines.—Is inclined to hilliness at the west and north, but the remainder is rolling. Ponds and marshes, containing both good and bad water, are numerous. No timber of any kind. Soil, variable, though in general of good quality. Classes 1 to 3.—*F. W. Wilkins*, 1884.

31. Outlines.—Is in general hilly. Ponds and marshes are numerous, and stones are plentiful on the hill tops. There is both good and bad water in abundance. No timber. The soil is variable, but, as a rule, very good. Classes from 1 to 3.—*F. W. Wilkins*, 1884.

32. Outlines.—North, hilly ground. The rich vegetation here shows that the soil is good, but on account of the extremely rough nature of the ground this range is better adapted for grazing than for any other purpose.—*E. Bray*, 1883.

Is very hilly throughout, with numerous lakelets, ponds and marshes, containing both good and bad water. The tops of the hills are stony. No timber of any kind. The soil is principally clay loam, and very good. Classes 1 to 3.—*F. W. Wilkins*, 1884.

33. Outlines.—Is very hilly and broken, except a portion along the west side, which is rolling. Stones are plentiful in the hilly part. There is both good and bad water in abundance. No timber. The soil is variable, but, in general, is very good. Classed from 1 to 3.—*F. W. Wilkins*, 1884.

South, hilly, with rich vegetation. Better adapted for grazing than for any other purpose.—*E. Bray*, 1883.

34. *Outlines*.—Is extremely hilly throughout, with many lakelets, ponds, &c., containing both good and bad water. Stones are plentiful. No timber. The soil is variable, though, as a rule, very good. Classed from 2 to 4.—*F. W. Wilkins*, 1884.
35. *Outlines*.—Is a rough, broken township, with hills varying in height from 30 to 80 feet. In the south-west a moderately even piece of low land was crossed, containing some alkaline sloughs and ponds. A conspicuous hill, at the south-west corner, has an altitude of 150 feet. A great deal of water in sloughs and ponds, with good grasses around them, occur in the hollows. Stones are plentifully scattered on the hills and ridges. The soil is clay, or sandy loam and gravel. The township is from second to third class.—*J. F. Garden*, 1883.
36. *Outlines*.—The soil is light, and growing short grass. Water good and fresh in all rivers and creeks. Where the lakes were alkaline there were deep sloughs in profusion.—*W. A. Ashe*, 1882.
A ridge, about 150 feet high, crosses the north-west corner of this township. South of this, for two miles, there is an even or rolling piece of dry prairie. The remainder of the surface is hilly, r high and rolling, with large ponds and sloughs. Cactus Lake extends to the north-east corner. The soil is sandy or clay loam, and is graded from classes second to third.—*J. F. Garden*, 1883.
37. *Outlines*.—Is an undulating, or easily-rolling prairie in the easterly part, with loam and clay. Soil, first class. In the west the land is somewhat higher, some of the ridges being 40 feet high. The soil is of a sandy nature, and classes second to third. A few large ponds and sloughs were seen, and Cactus Lake breaks on the south-east sections.—*J. F. Garden*, 1883.
38. *Outlines*.—Is rolling in the south and western parts. Towards the north and east the land becomes more broken, with numerous sloughs, ponds and scattered stones. Eye Hill Creek, a stream about 75 links broad, 3 feet deep, with a rapid current of from one and a-half to two miles per hour, enters in the south-west corner, running in a north-westerly direction and emptying into Manitou Lake. The banks at this point are about 15 feet high, and stony. The soil is sandy loam in the west and parts of the east sides, the rest of it being loam, with clay.—*J. F. Garden*, 1883.
39. *Outlines*.—Is broken, along its east and south-westerly sides, by the valley of the Eye Hill Creek. A small lake, with some poplar brush around it, was seen about the centre, along the southern boundary. As far as observed, the soil appeared to be clay loam and alkaline clay, with gravel on the ridges, and classed from 2 to 3.—*J. F. Garden*, 1883.
40. *Outlines*.—North, is good; all prairie, and somewhat rolling. Towards the fourth meridian the soil becomes better, and the country more desirable.—*G. B. Abrey*, 1883.

West, open prairie; surface undulating; some good meadows and fresh-water ponds. Soil, generally a gravelly loam, which would make pretty fair farming land, being open, light and warm, and supports a good growth of grass.—*W. Ogilvie, 1881.*

This township is high and rolling, with easy slopes in the north and north-east, and with frequent large ponds and sloughs. A low sand ridge, with choke-cherry bushes, extends into the south and east part of the township, rendering this portion of it dry, poor land.—*J. F. Garden, 1883.*

- 41. Outlines.**—Going north, on the western line, the land becomes much broken, though still with a good soil, to the first large lake in Sections 18 and 19, where it becomes very sandy, and continues north of the lake. An extensive clump of 6 to 8-inch poplars extends to another lake in Section 31.—*W. A. Ashe, 1882.*

South, good prairie, somewhat rolling. Towards the fourth meridian, or west boundary, the soil becomes better, and the country more desirable.—*G. B. Abrey, 1883.*

Is high, rolling and open along the southern part, with some large ponds in hollows. The northern part is partially wooded with poplar and broken with sand ridges and hollows.—*J. F. Garden, 1883.*

- 42. Outlines.**—Going north, on the western boundary, Section 6 is on the shore of a lake, with an extensive clump of 6 to 8-inch poplars, extending north along the line. The line crosses a lake in Section 7, and again another beautiful saline lake in Section 31.—*W. A. Ashe, 1882.*

Is rough, and broken with sand ridges, and a large quantity of scattered poplar clumps. Class 4.—*J. F. Garden, 1883.*

- 43. Outlines.**—Section 6 is partly submerged by a beautiful saline lake, and there is a pond in Section 7. An extensive clump of 6 to 8-inch poplars extends north along the west boundary. The land is well suited for settlement, and contains several tracts of excellent soil.—*W. A. Ashe, 1882.*

Has but little poplar bush. In the northern part the surface is even or undulating. Soil, hard clay loam. Class 2. In the south the land becomes broken by sand ridges, with poplar bush. A small saline lake occurs in the south-east corner, on the east side of which is a marsh or muskeg, slightly higher than the lake, and containing good drinking water.—*J. F. Garden, 1883.*

- 44. Outlines.**—In the south-west there is a grove of poplars, which continues to a lake, between Sections 7 and 18. A trail crosses Section 30 and a few small marshes along the township. The land is well suited for settlement, containing several tracts of excellent soil.—*W. A. Ashe, 1882.*

As far as observed, is hilly, and broken in the north, with ponds and sloughs in the hollows, and with a good deal of poplar brush. The soil is loam or clay loam. Classes 2 to 3.—*J. F. Garden, 1883.*

- 45. Outlines.**—Entering this township at the south-east corner, and going west, the country is hilly and wooded, with several ponds

and marshes. Going north, on the western boundary of this township, the line descends into the valley of the Battle River, after passing the first southerly tier of sections. The valley is fairly wooded, and there are also a few scattered clumps of poplars in the north parts of the township. The land is well suited for settlement, and contains several tracts of excellent soil. Any surface water which was come in contact with was all good and fresh.—*W. A. Ashe*, 1882.

Intersected diagonally by Battle River. Rough and hilly; poplar and scrub in bluffs; numerous grass swamps and ponds.—*H. B. Proudfoot*, 1883.

Sub-division.—This fractional township is rolling, broken and hilly prairie, with considerable bush on the south side of Battle River. It is broken by Battle River traversing it in a north-easterly direction, and by creeks flowing north and south to the river. There is sufficient timber for building, fencing, &c., and the supply of water is good and fresh. The soil is composed, principally, of black loam, of a good depth, and clay subsoil. It is well suited for farming or for grazing purposes, there being good soil, water and vegetation. It is ranked second class.—*G. E. MacMartin*, 1884.

- 46. Outlines.**—The western boundary crosses and recrosses the valley of a creek several times through this township. There are clumps of timber along the creek, and a few elsewhere. The land is well suited for settlement, containing several tracts of excellent soil. Water good and fresh.—*W. A. Ashe*, 1882.

The eastern boundary is rolling in the south, and very heavily-rolling in the northern portion. The whole eastern part, as far as could be seen, is well dotted with ponds, marshes and swamps. There are also several considerable lakes. There is only some scrubby poplar in the south. The land is first and second class.—*H. B. Proudfoot*, 1883.

Sub-division.—This fractional township is high-rolling and hilly prairie and bush. It is broken by a creek on the west side, and by sloughs on the east. There is fresh water in abundance. The soil is composed of black clay and gravelly loam, with clay and gravel subsoil. No minerals were seen. There is timber sufficient for fuel. It is suited either for farming or for grazing, and, taking it in general, it can be ranked as a 2nd class township.—*G. E. MacMartin*, 1884.

- 47. Outlines.**—Going north, on the western boundary, there is brush-wood, a few scattered clumps of small poplar, a few small marshes, and also a creek in Section 19. Water is good and fresh. The land is well suited for settlement, and contains several tracts of excellent soil.—*W. A. Ashe*, 1882.

This township is rolling prairie, with ridges lying west south-west. There are small patches of scrub and poplar, and a few large grass swamps and ponds. First and second class land.—*H. B. Proudfoot*, 1883.

Sub-division.—This fractional township is rolling and hilly prairie and bush, and is broken by lakes and sloughs. It is less

than one-half a township in size. There is plenty of timber for fencing, fuel, &c. No minerals. The soil is composed of a black loam, of a fair depth, with a clay subsoil. It is suitable either for farming or grazing purposes. The grasses are long and thick, and appearances, in general, good. It is rated as second class.—*G. E. Mac Martin*, 1884.

48. *Outlines*.—The timber on the western boundary of this township is principally brush wood. There is a trail in Section 3, the telegraph line in Section 10, a pond and trail in Section 24, a marsh and trail in Section 27, and a pond in Section 34. Water is good and fresh. The land is well suited for settlement. In the north it is rolling and level prairie. Soil is black loam, from 8 to 10 inches deep, with a sand subsoil. Class 1. Numerous bluffs of poplar, willows, and willow swamps.—*W. A. Ashe*, 1883.

Rolling prairie. There are small patches of scrub and poplar, and a few large grass swamps and ponds. First and second class land.—*H. B. Proudfoot*, 1883.

Sub-division.—This is a fractional township, and consists of very little over two tiers of sections, running north and south. The surface is all rolling prairie, with scrubby poplar and numerous swamps. The telegraph line and the Edmonton trail cross the township.—*J. Burke*, 1884.

49. *Outlines*.—All along the western portion of the township there is brushwood and scattered poplar. There are also several ponds and marshes, in which the water is good and fresh. The soil is very good, and the country, so far as seen, is well adapted for farming.—*W. A. Ashe*, 1882.

Southwards, the surface is rolling and level prairie. Soil is black loam, from 8 to 10 inches deep, with a sand subsoil. Class 1. Numerous bluffs of poplars and willow swamps.—*W. A. Ashe*, 1883.

This township is good agricultural country, first class but over-grown with poplar, and willow scrub.—*J. K. McLean*, 1883.

Sub-division.—The surface is undulating, and in parts rolling. Soil is a good black loam, from 8 to 12 inches in depth, and overlying a yellow and gray clay subsoil. Small detached bluffs of poplar, from 3 to 4 inches in diameter, with very large patches of brush and willow, cover a very large area of the land. Water is good, but not plentiful, in the northern part. Towards the south it becomes more plentiful in ponds and swamps. The grass is luxuriant in the north half, and there are some small pieces of hay land. There are some nice sections of land in this township well supplied with wood for fuel and fencing.—*H. Carre*, 1884.

50. *Outlines*.—The western boundary is crossed by a creek in Section 10-11, and a trail and creek in Section 14-15, another creek in Section 22-23, and two ridges in Section 34. There are almost continuous clumps of small poplar along the line. Water good and fresh. The land is well suited for settlement.—*W. A. Ashe*, 1882.

This township is good agricultural country. First class, but overgrown with poplar and willow scrub.—*J. K. McLean*, 1883.

Sub-division.—The surface is gently-undulating, broken only by a ridge of low, steep hills, running across the north half. Soil, a deep black loam, from 8 to 12 inches in depth, overlying a yellow clay subsoil. A few small bluffs of poplar, from 3 to 6 inches in diameter, may be found along the north and west boundaries, while large patches of poplar and willow scrub cover a large area. Water is plentiful and good in the north-east portion. There are a few nice sections, suitable for farming purposes, with enough wood for fuel and fencing, and excellent pasture for cattle.—*H. Carre*, 1884.

- 51. Outlines.**—Surveyed the western boundary—the 4th Initial Meridian—of this township. The whole township consists only of a strip of about three-quarters of a mile wide, is well suited for settlement, and has an excellent soil, with scattered clumps of small poplar all over the surface.—*W. A. Ashe*, 1882.

The strip of about three-quarters of a mile forming this township is rolling prairie, more than two-thirds of which is covered by bluffs of poplars and willows. The soil is a very rich black loam.—*J. I. Dufresne*, 1884.

Sub-division—Fractional, containing only 2,860.66 acres. The surface ranges from rolling to hilly, having bluffs of poplar, willow and other small brush, which occur more thickly on Sections 12, 13 and 24, but only fit for fuel. These sections are less rolling than elsewhere. The soil is chiefly a sandy loam, about 10 inches deep, on a sandy subsoil, and supports a good growth of grass. The water in the many ponds is fresh and good, and a fine lake of excellent water—partly in Section 36—extends into the township about a mile to the north.—*W. R. Reilly*, 1884.

- 52. Outlines.**—The western boundary, going north, crosses a lake in Section 1 and another lake between Sections 12 and 13, with occasional clumps of small poplar along this part of the line. In Section 24 two trails, and a creek in Section 25, and occasional clumps of small poplar. Water good and fresh in all the lakes and creeks. The land is well suited for settlement, containing several tracts of excellent soil. The northern portion, being closer to the Saskatchewan River, contains a larger proportion of sand than southwards, but is, notwithstanding, well adapted for farming.—*W. A. Ashe*, 1883.

The strip of about three-quarters of a mile wide forming this township is hilly prairie, covered partly by bluffs of poplars and willows. The soil is of a good sandy loam, classified as 1½ rate.—*J. I. Dufresne*, 1884.

Sub-division.—Fractional, having a total area of 2,934.86 acres. The north half is rolling, with scattering clumps of bushes. The south half is rough and broken, with a considerable quantity of poplar and small brush along the east and north side of Lake No. 3, in Sections 12 and 13. As a rule, the timber is scrubby, and only fit for fuel. The soil is a sandy loam, of good quality, class 2, except in Sections 12 and 13, where it is lighter, and class 3. There is abundance of water. The north part contains small ponds, in which the water is generally good, and Sections 1 and 12, to

to the south, are much broken by fine fresh-water lakes, in which the water is excellent, and contains many small fish. Lake No. 3—Section 12—is the source of Big Gully Creek. A swamp, extending some distance northwards and north-westerly, borders the north of the lake, and makes a connection with Lake 5, Township 51, Range 27, out of which Big Gully Creek runs.—*W. R. Reilly, 1884.*

53 *Outlines.*—This is a fractional township. It is crossed by the valley of the Saskatchewan River, where there is some timber. The river is about 40 chains wide. North of the river there is some small wood and a number of marshes, in which, together with the river, the water is good and fresh. Being close to the Saskatchewan River, the country is of a hilly nature, with a soil, which, though light, is still adapted for farming purposes. The wood which is seen is in scattered bluffs.—*W. A. Ashe, 1883.*

The strip of about three-quarters of a mile wide forming this township is crossed, in Section 24, by the Saskatchewan River. The part lying south of the river is nearly all open prairie, and north of the river is more than half covered by bluffs of small poplars and scrub willows. The soil is a very good sandy loam.—*J. I. Dufresne, 1884.*

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXIX.

5. *Outlines*.—Rolling prairie; the surface very stony; the soil is gravelly, dry clay and sand loam. Battle Creek crosses this township. It is a fine stream of clear water.—*J. G. Sing*, 1883.
6. *Outlines*.—The north is rolling and stony prairie. Trails cross the line in Sections 36, 35 and 33. Battle Creek was crossed in Section 34, and creeks in 34 and 32.—*A. Bourgeault*, 1884.

Rolling prairie; the surface very stony; the soil is gravelly, dry clay and sand loam. Battle Creek crosses this township, flowing in a southerly direction. It is a fine stream of clear fresh water.—*J. G. Sing*, 1883.

7. This township is in the Cypress Hills, and is very much broken. The soil on these hills is of excellent quality, being a rich black soil, covering a clay subsoil. The valleys and hill tops, in the north-west, are nearly all wooded with tamarac, spruce, pine, poplar and dense scrub. Battle Creek traverses a part of this township.—*J. G. Sing*, 1883.

Several hills and ridges were crossed by east line. Trails cross the line in Sections 13, 24 and 36; creeks in Sections 1 and 36. Very near the line is an artesian spring. In the vicinity of the creek, in 36, wood was found, but very little south of this locality.—*T. Fawcett*, 1882.

Sub-division.—Is broken, rolling and stony prairie, except the eastern part, which is level and gently-rolling. The soil is gravel and dark sand, with gravel and yellow sand subsoil. It ranks first and third class. A small stream, 50 feet wide and about 1½ feet deep, runs in a south-easterly direction, through a deep valley, from 30 to 50 chains wide. The land and the valley is first class, and is well adapted for wheat cultivation. The old Fort Walsh is situated in the valley, in Section 21. The western part is well watered by a creek of fresh water. Wood was found in the north and along most of the creeks, and in the coulées.—*A. Bourgeault*, 1884.

8. *Outlines*.—This township is in the Cypress Hills, and is very much broken. The soil on those hills is of excellent quality, being a rich black soil, covering a clay subsoil. South-westwards, the valleys and hill tops are nearly all wooded with tamarac, spruce, pine, poplar and dense scrub.—*J. G. Sing*, 1883.

Northwards and eastwards, the country is usually rolling and undulating prairie, but occasionally there are hilly portions. The soil is generally a gravelly and sandy loam. There are a good many small streams, and several lakes. Except in Section 1, there is no wood in the north-east half of the township. There appears,

however, to be plenty in the south-west half, where the surface is much more hilly and broken. A number of trails cross this township from Fort Walsh.—*T. Fawcett*, 1882.

Sub-division.—Is rolling and undulating prairie, sloping to the north. The soil is somewhat gravelly and sandy, with sandy and sandy loam subsoil, and may be ranked as first and second class. The north half is well suited for agricultural purposes, being well watered by marshes, and also by a small stream, which runs east from the foot of the Four-Mile coulée. In the south the country is more rolling and broken. Cypress, poplar and willow are to be found. The main cart trail, north from Fort Walsh, enters the township in Section 3. Other trails cross the south line in Sections 2 and 4. Creeks were crossed in 3, 4 and 6.—*A. Bourgeault*, 1884.

9. *Outlines*.—West, broken and hilly, being on the northern slope of the Cypress Hills. The soil is a good loam and gravel.—*A. F. Cotton*, 1883.

The soil between Ranges 29 and 30 is first rate, and contains splendid ponds of water which is invariably fresh. This locality is a most desirable one for settlement.—*C. Desjardins*, 1882.

NOTE.—The northern half of the western boundary was surveyed by Cotton; the south half by Desjardins.

East, surface very broken, but the land suitable for grazing purposes. South, this township presents the same general characteristics as Range 30. The drainage is towards the north and north-east. The high, narrow, contorted escarpment which forms the north bank of Battle Creek is the watershed of the streams which feed the Box Alder, flowing north-west, Maple Creek, flowing north, and Battle Creek flowing south-east. The pasturage throughout this township is excellent. This, combined with its pure water and proximity to timber, renders it a desirable location for stock raising. Its agricultural advantages in regard to the cultivation of the soil are marred by the quantity of stone and shingle, intermixed with its rich loam.—*T. Fawcett*, 1882.

Sub-division.—This township is all rolling and undulating prairie, which is increasingly rolling towards the Cypress Hills. It is very broken along a creek of the 5th township meridian, and gently-rolling along the westerly limit. It is also broken by the ravines of a creek entering by Section 3 and leaving by Section 24. The soil of the township is generally a sandy loam, somewhat stony, and about class 2. All water is fresh. The Fort Walsh trail crosses the township.—*E. Fafard*, 1883.

10. *Outlines*.—West, is more level than Township 9. A creek, a branch of Box Alder, runs about one and a-half miles east of the line, and numerous gullies run back from it, to a distance of over two miles, in some places. The soil is a light loam. Not desirable for settlement.—*A. F. Cotton*, 1883.

East, surface less broken than Township 9 of this range. In section 12 the boundary line crosses a well defined creek bed, which it crosses and re-crosses until it finds its way through a high ridge of hills to the east, which rises to the height of 250 feet above the

surrounding plain. It presents a barren clay surface, indented by numerous deep ravines, draining towards the creek. Specimens of lignite and clay ironstone were met with, and the hill sides literally sparkle with crystals of selenite. There occur in great quantities, and will doubtless become a source of value. In Section 36 is a stream which is dry in summer. *T. Fawcett, 1882.*

Sub-division.—Rolling and undulating prairie, gently sloping to the south. It is broken by ravines, for four miles north along the creek, which reaches from Section 31 to Section 4. Soil, sandy loam, somewhat stony. Class, 2. Water is scarce. The trail from Fort Walsh to Battleford crosses the south-west corner. —*E. Fafard, 1883.*

11. *Outlines.*—The ground rises suddenly in Section 31, at 10 chains from the township corner; then follow hills and undulations south of the north boundary, and extending through the whole of the western portion of the township, except in a portion of Section 18, which is almost level. The soil is light clay, or a mixture of it with sandy loam and gravel. Towards the south, however, the gravel gradually diminishes for the last three miles. Box Alder Creek crosses this township in Section 19. It has steep embankments, about 20 feet high, and is from 40 links to 1 chain wide, but dry. Here and there on its shores are rose bush and box alder, or ash-leaved maple trees.—*C. Desjardins, 1882.*

East, very rolling and stony. In Section 13 Box Alder Creek was crossed. Water may be found in marshes and ponds. —*T. Fawcett, 1882.*

Sub-division.—North of Box Alder Creek, which crosses the township centrally, east and west, it is very hilly, ascending southwards. South of the creek it is rolling and undulating prairie, except along the creek, where it is broken by ravines. The soil, generally, is a sandy loam, and gravelly, except in the level valley of the creek, where it is clay loam. Class 1. The creek dries early in the season. The southern half of the township is hilly, rolling and undulating by turns. A branch of Box Alder Creek enters the township by Section 5 and joins the creek in Section 19. In the valley of this branch there is a growth of small wood. —*E. Fafard, 1883.*

12. *Outlines.*—North, land in general is sandy, and not suitable for farming purposes, but will make fair grazing land. Water mostly alkaline.—*W. T. Thompson, 1882.*

From the north-west corner the division line between Ranges 29 and 30 through this township runs through a level valley, the soil of which is a strong clay, with a few patches of alkali. Box Alder Creek runs south about one mile west of the line. It contained, when seen on 25th of September, only very few pools of water.—*C. Desjardins, 1882.*

East, hilly and rolling. Creeks cross the line in Sections 12 and 13. The Canadian Pacific Railway crosses in Section 36.—*T. Fawcett, 1882.*

Sub-division.—This township is hilly, rolling and undulating. The Canadian Pacific Railway crosses the township in a level

valley about one mile in width, which contains a strong clay soil. Class 1. The rest of the township is generally a sandy loam, of about a third class quality. There is no wood, and water is very scarce. Forbes station, on the Canadian Pacific Railway, is located near the north-east corner.—*E. Fafard*, 1883

13. *Outlines*.—Going north, on the western boundary, the first mile and a-half lies in a valley, the soil of which is a sticky grey clay, after which there is a better country. The surface is rolling, parts being hilly. Soil, sand loam. Along the easterly side of Many Island Lake are some magnificent hay meadows. Some parts very stony, especially on Sections 18 and 19. Soil, chiefly sand and gravel; class 3 throughout. Trail from Fort Walsh crosses near the middle of Section 6, and passes north along the easterly tier of sections. The eastern end of a large pond of bad water lies on the southern half of Section 31.—*J. G. Sing*, 1882.

East and south, sandy, and poor for farming, but will make fair grazing land. Water mostly alkaline.—*W. T. Thompson*, 1882.

Sub-division.—Big Salt Lake covers and breaks upon half a dozen sections of the north centre of the township. The surface is rolling and undulating, with a light sandy loam soil of generally class 3. The sloughs and ponds throughout are all alkaline. The Fort Walsh trail crosses north and south.—*C. Desjardins*, 1883.

14. *Outlines*.—Along the north the surface is stony and gravelly land. Soil, mostly classes 2 and 3. Towards the west it is level and rolling prairie, some surface stone. Soil, mostly sand and clay. Class 2.—*J. G. Sing*, 1882.

East, generally sandy, but will make fair grazing land. Much of the water is alkaline.—*W. T. Thompson*, 1882.

Sub-division.—The Fort Walsh trail crosses the township north and south. The surface is highly-rolling, stony and gravelly on the knolls, and light in the bottoms. Big Salt Lake crosses Sections 1, 2 and 3.—*C. Desjardins*, 1883.

15. *Outlines*.—Is hilly, dry and very undulating. Soil, entirely of sand, and generally, third class, though in some places it may be considered fourth class, the soil being gravelly and very poor.—*A. C. Talbot*, 1882.

East, surface undulating and hilly. The soil is a clay loam, with stony hills and gravelly ridges. Water brackish.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie. Soil, mixed clay on clay sub-soil; generally class 2. Fresh water is in good supply in a number of lakes. In some places the surface is somewhat stony and gravelly. No wood. A cart trail crosses the township.—*C. C. DuBerger*, 1883.

16. *Outlines*.—North, the soil is good throughout. Surface rolling and water good, but scarce. East, surface undulating and hilly. The soil is a clay loam, with stony hills and gravelly ridges. Several fresh-water marshes were crossed.—*T. Fawcett*, 1882.

Is hilly, dry, and very undulating. Soil, sandy, and generally third class, though in some places it may be considered fourth

class, the soil being gravelly and very poor. In Section 19 the line crossed a marsh—the only water.—*A. C. Talbot*, 1882.

Sub-division.—Rolling prairie, very similar to Township 15 of this range. Soil, about the same, and water in greater supply.—*C. C. DuBerger*, 1883.

17. *Outlines.*—In the central west it is hilly, and north and south of this it is rolling prairie. A good sized marsh was crossed in Section 19. Water scarce.—*H. B. Proudfoot*, 1882.

South, soil is good throughout. Surface rolling and water good, but scarce. East, undulating surface. Soil, clay loam, suitable for agricultural purposes.—*T. Fawcett*, 1882.

Sub-division.—Rolling prairie. Soil, brown sandy loam in the valleys, and gravelly on the higher levels and ridges, with a subsoil of white clay, and, in the higher parts, gravel. Water is plentiful in spring, but dries as the season advances. This township has a good farming soil in the lower levels, but the rainfall in summer is reported to be slight. No wood. The Fort Walsh and Red Deer trail crosses the township.—*C. LeBer*, 1883.

18. *Outlines.*—The north and west of this township consists of rolling and hilly prairie. In Section 36 there is an old trail, and in 35 the Medicine Hat and Red Deer trail. Water is scarce, generally, but there is a large marsh in Section 19.—*H. B. Proudfoot*, 1882.

East, undulating surface. Soil, clay loam, suitable for agricultural purposes.—*T. Fawcett*, 1882.

Sub-division.—Centrally, it is a level prairie, watered by a limited number of ponds and hay marshes of good water. Soil, sandy loam, 10 inches deep, on a subsoil of white clay mixed with gravel, and adapted for farming. The remainder of the township is rough and hilly, with intervening good farming flats. There is a scarcity of wood and water, and the summers are said to be dry. The trail from Fort Walsh to the Red Deer River crosses the township.—*C. LeBer*, 1883.

19. *Outlines.*—West, surface rolling; sometimes knolly and stony. Soil, gravelly and light. Poor grass and very little water.—*W. Ogilvie*, 1881.

East, open, rolling prairie, with fair soil of sandy loam.—*E. Bray*, 1882.

South and north, undulating prairie.—*H. B. Proudfoot*, 1883.

Sub-division.—Partly level and partly rolling, except in the south-west, where it is rough and hilly. Soil, sandy loam, 10 inches deep, on a subsoil of white clay mixed with gravel and coarse sand. Some ponds and hay marshes occur, but water is scarce, and the rainfall is said to be light. There is no wood. Otherwise the soil is of a good quality for agriculture.—*C. LeBer*, 1883.

NOTE.—From Township 19 inclusive, northwards in this range, the townships are fractional.

20. *Outlines.*—West, the north part of this township is rolling, and the soil very poor; in the south part the soil is somewhat better, but still poor. Grass very poor, and very little water.—*W. Ogilvie*, 1881.

First four sections, going west, on the north boundary, are drifting sand, while the remainder is a light sandy soil. Going south, on the east boundary, the first three and a-half sections are mostly composed of drifting sand; the remainder is open, rolling prairie, with a fair soil of sandy loam.—*E. Bray*, 1882.

South, undulating prairie. Fourth class soil.—*H. B. Proudfoot*, 1883.

Surveyed the Fourth Initial Meridian, on the western side of this township, and found the country, rolling with a poor, light soil and very little water.—*W. Ogilvie*, 1881.

Sub-division.—Southern part, rolling prairie. Soil, sandy loam, 10 inches deep, on subsoils of sandy clay and gravelly clay. Good for agricultural purposes, although water is scarce, but good. The northern part is unfit for farming, being large sandhills, having in, some places, clumps of cherry trees and alders. This is the only wood, but wood can be got from the Saskatchewan, which is close at hand.—*C. LeBer*, 1883.

- 21. Outlines.**—West, the surface of this township is rolling, and the soil very poor.—*W. Ogilvie*, 1881.

Sections 1, 2, 3 and 4 are little else but drifting sandhills, Section 5 is a grade better, but still poor. Going north, on the east boundary, the first two and a-half miles are drifting, sandy land. The remainder is rolling prairie, with only fair soil.—*E. Bray*, 1882.

- 22. Outlines.**—The confluence of the Red Deer and the South Saskatchewan is on Section 36 of this township. At its mouth the Red Deer is about 20 chains in width. Its waters are very muddy and the current rapid. The surface is very much broken by the deep coulées running into the rivers. At the mouth of the Red Deer there is a considerable quantity of small wood, suitable for fuel and fencing, including, principally, poplar, elm, ash, rose, willow and thorn scrub. The soil is light and sandy. Light draft steamboats can be run on the Saskatchewan.—*T. R. Hewson*, 1883.

West, in Section 6, the line strikes the South Saskatchewan, which is from 12 to 14 chains wide and 4 feet deep. In places the banks are precipitous, and composed of a soft friable sandstone. There is, all through it, a seam of hard, red-colored sandstone, about 4 feet thick, suitable for building purposes. There are many thin seams of coal scattered through it, but they are of no practical value. There is no wood to be seen on the river.—*W. Ogilvie*, 1881.

East, rolling prairie, with only fair soil, which extends to the south bank of the Saskatchewan River, in Section 36. The river here has the same general features that characterize it elsewhere, high and rough-cut banks, with deep lateral ravines, and averaging between 28 to 40 chains in width, including sand bars.—*E. Bray*, 1882.

- 23. Outlines.**—This township is very much broken by deep coulées running into the Red Deer River, which flows through the southwestern portion of it in a south-easterly direction, and enters the South Saskatchewan shortly after crossing the boundary between

this and the next township south. The soil is light and sandy.—*T. R. Hewson, 1883.*

Owing to the tortuous course of the Red Deer River, the surface of the southern half of this township is much broken by ravines, the sides of which are covered with granite boulders, and much scrub in the bottoms. Red Deer River here is in a valley from 300 to 350 feet deep. The banks of the river are generally covered with poplar, small birch and cherry. Very little of it would be of much use for anything but fuel. The waters of the river and its numerous shifting sand bars occupy a bed about fifteen chains wide. The streams of water, however, do not occupy more than from one-third to one-half of that width, with an average depth of about $2\frac{1}{2}$ feet. The surface of the country beyond the river's influence is rolling, with a light and gravelly soil.—*W. Ogilvie, 1881.*

East, the valley of the Red Deer River, at Section 13, contains some balm of Gilead and poplar of fair size. The line terminates on the north side of the Red Deer River, about a quarter of a mile west, where it joins the waters of the South Saskatchewan.—*T. Kains, 1882.*

- 24. Outlines.**—West, surface rolling, with some deep and rough ravines, which are very stony. Soil, light and gravelly, with good grass. Some scrub and small poplar in the ravines.—*W. Ogilvie, 1881.*

North, rolling prairie; first class soil. Some grass swamps. Along the east the country is also rolling, with gravel and stony ridges and grass swamps.—*T. Kains, 1882.*

- 25. Outlines.**—North, hilly and broken country.—*J. Dudderidge, 1883.*

West, open, rolling prairie south, and heavily-rolling north.—*W. Ogilvie, 1881.*

South, rolling prairie; first class soil. Some grass swamps. *T. Kains, 1882.*

Rolling and undulating prairie, well dotted with marshes and small lakes. Towards the south-east there are scattered boulders in the soil. The soil is a clay loam, and class 1; but there are also some portions of sandy loam of a good quality, which will grade class 2. The eastern side is more hilly and broken than the south and west.—*T. Fawcett, 1883.*

Sub-division.—Hilly and broken, except in the south, where it is rolling. There is no wood, but there is good, fresh, surface water, and it is excellent grazing land. Soil, a sandy loam, and class 2.—*J. Dudderidge, 1883.*

- 26. Outlines.**—West, surface rolling. Soil, generally very light and gravelly, with good grass on it. There are some flats of clay loam, but they are very stony; few meadows or ponds.—*W. Ogilvie, 1881.*

East, hilly in places. An old cart trail was crossed in Section 1. In Section 25 the line crosses two small creeks. There are also numbers of small marshes containing good water.—*T. Fawcett, 1882.*

Sub-division.—Rolling and undulating prairie, stony in places and hilly northwards. Soil, clay loam, generally class 1; good land. Good, fresh, surface water and excellent pasturage, and adapted for agriculture.—*J. Dudderidge*, 1883.

27. *Outlines.*—West, surface rolling, a good deal of it composed of pure sand, sometimes in drifted heaps, with scrub on it; grass, generally poor; a few meadows and some large ponds.—*W. Ogilvie*, 1881.

The eastern side is principally rolling and undulating prairie. Sections 10, 11, and 12 are rather stony and hilly. A fair supply of surface water may be found. Soil, generally clay loam on clay subsoil. Class 1. Good land.—*T. Fawcett*, 1883.

The southern portion is hilly and broken. Very little water.—*J. Dudderidge*, 1883.

28. *Outlines.*—North, comparatively level prairie. The soil is good, and a considerable quantity of good water is obtainable.—*T. Fawcett*, 1883.

West, surface rolling and knolly. The soil is generally a gravelly loam, having thin grass, and few meadows or ponds.—*W. Ogilvie*, 1881.

29. *Outlines.*—Fractional. Is mostly rolling, with some hilly land near the centre. There is plenty of good water, but no timber. Soil, mostly a good clay loam. Classes 1 and 2.—*F. W. Wilkins*, 1884.

West, surface rolling. Soil, generally light; in some flats comparatively good; many good meadows.—*W. Ogilvie*, 1881.

South, level prairie. Soil good; a considerable quantity of good water.—*T. Fawcett*, 1883.

30. *Outlines.*—West, surface rolling. Soil, generally light; in some flats comparatively good; many good meadows.—*W. Ogilvie*, 1881.

Is rather hilly in general. Plenty of good water. No timber. Soil, mostly clay loam, with some sand loam at the north. Classed 1 and 2. In the south the surface is rolling prairie. The line runs into a saline lake in Section 1.—*F. W. Wilkins*, 1884.

31. *Outlines.*—Fractional. This township is narrow, and not much over one section in width. It approximates closely to the same numbered township in the next range west, viz.: Range 1, west of the 4th Initial Meridian. This township is inclined to be hilly. The soil is good, with plenty of good water. There is no timber.—*F. W. Wilkins*, 1884.

West, surface rolling, and poor gravelly soil. A few ponds and marshes.—*W. Ogilvie*, 1881.

32. *Outlines.*—North, rolling land, with a fair soil of sandy loam.—*E. Bray*, 1883.

West, surface rolling. Many ridges of pure sand, covered with scrub. Very little of the soil anygood. A few meadows.—*W. Ogilvie*, 1881.

This township is narrow, and not much over one section in width. It approximates closely to the same numbered township

in the next range west, viz.: Range 1, west of the 4th Initial Meridian. This township is mostly rolling. The soil is good, plenty of good water. There is no timber.—*F. W. Wilkins*, 1884.

- 33. Outlines.**—West, surface exceedingly rough, and in many places very stony. Soil, poor. Many ponds and meadows.—*W. Ogilvie*, 1881.

South, rolling, with a fair soil of sandy loam.—*E. Bray*, 1883.

The township is narrow, and not much over one section in width. It approximates closely to the same numbered township in the next range west, viz.: Range 1, west of the 4th Initial Meridian. This township is mostly rolling. The soil is good, with plenty of good water. There is no timber.—*F. W. Wilkins*, 1884.

- 34. Outlines.**—Fractional. This township is narrow—not much over one section in width. It approximates closely to the same numbered township in the next range west, viz.: Range 1, west of the 4th Meridian. This township is very hilly. The soil is good with plenty of good water. There is no timber.—*F. W. Wilkins*, 1884.

TOWNSHIPS WEST OF THIRD INITIAL MERIDIAN.

RANGE XXX.

NOTE.—All the townships which are described in this range are fractional ones.

5. *Outlines*.—The country is rolling prairie. The surface is very stony. The soil is a gravelly dry clay, and sand loam.—*J. G. Sing*, 1883.
6. *Outlines*.—The country is rolling prairie. The surface is very stony. The soil is a gravelly dry clay, and sand loam.—*J. G. Sing*, 1883.
7. *Outlines*.—This township is in the Cypress Hills, and is very much broken. The soil on these hills is of excellent quality, being a rich black soil, covering a clay subsoil; the valleys and hill tops nearly all being timbered with tamarac, spruce, pine, poplar and dense scrub.—*J. G. Sing*, 1883.
8. *Outlines*.—The north of this township is very heavily-rolling and hilly prairie, with some creeks and a few marshes, all containing good water. The soil is of an excellent quality and the grass is good.—*T. Fawcett*, 1882.

This township is in the Cypress Hills, and is very much broken. The soil on these hills is of excellent quality, being a rich black soil, covering a clay subsoil; the valleys and hill tops nearly all being timbered with tamarac, spruce, pine, poplar and dense scrub.—*J. G. Sing*, 1883.

The southerly two-thirds of the western boundary of this township is broken and hilly, and most of it is covered with a thick growth of wood. There are several rivulets, and in the northern part there are some ponds and marshes. The soil, generally, is a clay loam, and the grass is very fair in quality.—*W. Ogilvie*, 1881.

Sub-division.—Is broken and hilly prairie, unfit for cultivation, except in the south halves of Sections 22, 23, 24, and the north halves of Sections 13, 14 and 15, which are level prairie. The soil is sandy loam, with a clay and clay loam subsoil. In a valley about two and a-half miles wide the soil is sandy, gravelly and stony. Both banks are broken and stony. A small stream of good water, $1\frac{1}{2}$ links deep and from 40 to 50 links wide, winds south south-east. The wood is poplar, spruce and cypress, good for fuel and fencing only.—*A. Bourgeault*, 1884.

9. *Outlines*.—West, surface much broken by ravines from Cypress Hills, the foot slopes of which are in the third tier of sections. The soil is a good clay loam, which would make excellent farms. Grass very good.—*W. Ogilvie*, 1881.

East, from the foot of the Cypress Hills, the soil is first rate, and contains splendid ponds of very good water. In addition the superior quality of ground in the vicinity of the Cypress Hills,

and so well wooded, makes it one of the most desirable places for settlement.—*C. Desjardins*, 1882.

South, the base line passing along the northerly slope of the Cypress Hills, crosses a very broken surface. Deep ravines and high hills are met with in succession, and lakelets, fed by springs, of pure fresh water, are of frequent occurrence. The soil in the valleys and bottoms is a rich clay loam, while on the hill tops it is usually gravelly and stony. The grasses are luxuriant, presenting, in the month of September, the same flowery appearance as the surrounding prairie to the north and east did in the month of June. In Section 1 a small rivulet winds its way through a ravine 70 feet in depth, to a branch of Box Alder Creek, on the north.—*T. Fawcett*, 1882.

East, broken and hilly, being on the northern slope of the Cypress Hills.—The soil is a good loam and gravel.—*A. F. Cotton*, 1883.

Sub-division.—North, it is slightly undulating and rolling, but it suddenly ascends northward, in Sections 25 and 26. Soil, light clay, or a mixture of it with sandy loam and gravel. South, it is hilly and very undulating, increasingly so towards the Cypress Hills. No water or wood. The Fort Walsh cart trail crosses the township.—*E. Fafard*, 1883.

- 10. Outlines.**—West, surface broken by a few ravines; otherwise a generally upward slope to Cypress Hills. Soil, a fair sandy loam, with good grass.—*W. Ogilvie*, 1881.

East, is more level than Township 9. A creek, a branch of Box Alder, runs about one and a-half miles east of the line, and numerous gullies run back from it, to a distance of over two miles in some places. The soil is a light loam. Not desirable for settlement.—*A. F. Cotton*, 1883.

Sub-division.—Gently-rolling and undulating, except Sections 1, 2, 11 and 12, where it suddenly ascends to the south. Soil, light clay, or a mixture of it with a sandy loam and gravel. No water, except by digging. No wood. Class 2. The Battleford and Fort Walsh trail crosses the township in a northerly and southerly direction.—*E. Fafard*, 1883.

- 11. Outlines.**—West, the surface is much broken by ravines. There are some patches of fair grass and soil, but very little water.—*W. Ogilvie*, 1881.

East, the ground rises suddenly in Section 36, at 10 chains from the township corner; then follows hills and undulations south of the north boundary, and extending through the whole township, except in a portion of Section 13, which is almost level. The soil is light clay, or a mixture of it with sandy loam and gravel. Towards the south, however, the gravel gradually diminishes for the last three miles. Box Alder Creek crosses this township from Section 24. It has steep banks, about 20 feet high, and is from 40 links to 1 chain wide, but dry. Here and there on its shores are rose bushes and box alder or ash-leaved maple trees.—*C. Desjardins*, 1882.

Sub-division.—Rolling and undulating prairie. Soil, sandy loam, and gravelly. Class 2. Box Alder Creek enters in Section

24 and leaves by 35. After meandering in a north-west direction, the water dries up as the season advances. The Fort Walsh trail crosses the township, as also does the C.P.R. No wood.—*E. Fafard*, 1883.

- 12. Outlines.**—North, level prairie. The line crosses Box Alder Creek and the Fort Walsh cart trail.—*W. T. Thompson*.—1883.

West, is composed of clay flats of sedimentary deposit, being washed down from the surrounding heights. In it are some gravel knolls, which rise to a height of fully 200 feet above the flats.—*W. Ogilvie*, 1881.

East, going south, the line runs through a level valley, the soil of which is strong clay, with a few patches of alkali. Box Alder Creek runs south about one mile west of the line. It contained, when seen, on 25th of September, only very few pools of water.—*C. Desjardins*, 1882.

Sub-division.—Level prairie extending in a level valley occasioned by the Box Alder Creek, which meanders through it, and dries up as the season advances. The soil is mostly a strong clay. Class 1. The C. P. R. crosses Sections 12, 1 and 2. The Fort Walsh trail also crosses the township. No wood.—*E. Fafard*, 1883.

- 13. Outlines.**—West, Many Island Lake occupies about one-third of this township. The southern half is composed of clay flats of sedimentary deposit, being washed down from the surrounding heights and deposited in the flats around the lake. Those flats would, if properly cultivated, make good farms. They have a tendency, however, to bake and crack into hard lumps.—*W. Ogilvie*, 1881.

East, mostly level or rolling prairie; some parts very stony, especially on Sections 13 and 24. Soil, chiefly sand and gravel. Class 3 throughout. Trail to Fort Walsh crosses near the middle of Section 1. The eastern end of a large pond of bad water lies on the southern half of Section 36. The first mile and a-half north of the base line lie in a valley, the soil of which is a sticky grey clay; then a better country exists. The surface is rolling parts being hilly. Soil, sandy loam. Along the easterly side of Island Lake, in Sections 25 and 36, are some magnificent hay meadows.—*J. G. Sing*, 1882.

South, level prairie. McKay's Creek was crossed in Section, 2 and the trail to Fort Walsh in 1. An old trail was also crossed in Section 1.—*W. T. Thompson*.—1883.

Sub-division.—Many Islands Lake covers Sections 35 and 26, and parts of 23, 24 and 25. The flats along the lake are hay meadows, of excellent quality.—*C. Desjardins*, 1883.

- 14. Outlines.**—North, rolling prairie. The soil is sandy loam. Classes 2 and 3.—*A. C. Talbot*, 1882.

West, the surface of the northerly part of this township is rough and stony; the soil generally gravelly loam; grass good. In Section 7 the line struck Island Lake, which is a little over $4\frac{1}{2}$ miles wide where the line crosses it. Its waters are slightly alkaline, and appear to be shallow.—*W. Ogilvie*, 1881.

Along the east boundary the country is level and rolling prairie; some surface stone. Soil, mostly sand and clay. Class 2. Along the north-easterly side of Many Islands Lake are some magnificent hay meadows. On the north boundary the soil is heavier than in the centre of the township, being a light clay loam.—*J. G. Sing*, 1882.

Sub-division.—Many Islands Lake covers part of Sections 1, 2, 11 and 12. The country is flat along the lake, and these flats sustain excellent crops of hay. The water is clear, but slightly alkaline.—*C. Desjardins*, 1883.

- 15. Outlines**.—North, hilly, dry and very undulating. Soil, sandy, and generally third class—in some places fourth class, the soil being gravelly and very poor.—*A. C. Talbot* 1882.

West, surface rolling; sometimes hilly and stony. Soil, a fair sandy loam.—*W. Ogilvie*, 1881.

East and south, the country is rolling prairie. The soil is sandy loam; 2nd and 3rd class.—*A. C. Talbot*, 1882.

Sub-division.—Surface generally rolling. Soil, class 2. No water. No wood. A fractional township, being not a tier of sections wide.—*C. C. DuBerger*, 1883.

- 16. Outlines**.—North, open prairie.—*T. Fawcett*, 1882.

West, surface rolling; sometimes hilly and stony. Soil, a fair sandy loam. Grass fair. A few meadows and ponds. Granite boulders on the hills.—*W. Ogilvie*, 1881.

East and south, hilly, dry, and very undulating. Soil, sandy, and generally third class, but in some places fourth class; gravelly and poor.—*A. C. Talbot*, 1882.

Sub-division.—Similar to No. 15. A fractional township.—*C. C. DuBerger*, 1883.

- 17. Outlines**.—North and east, undulating prairie. First class farming land. A good sized marsh in Section 24, but water is scarce.—*H. B. Proudfoot*, 1882.

South, open prairie.—*T. Fawcett*, 1882.

Sub-division.—This township is not over 44 chains wide. It is dry, rolling prairie. Soil, brown loam, about 10 inches deep; good for farming, if rainfall is favorable.—*C. LeBer*, 1883.

- 18. Outlines**.—North, traverses a range of hills, which extends a short distance into the south. Undulating prairie.—*J. K. McLean*, 1883.

East and south, undulating prairie. First class farming land.—*H. B. Proudfoot*, 1883.

Sub-division.—Is like Township No. 17 in size and general topography.—*C. LeBer*, 1883.

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J.B. Lynell.

DESCRIPTIONS

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DOMINION OF CANADA.

Dept. of Interior

BETWEEN THE THIRD AND FOURTH INITIAL MERIDIANS.

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